

# The Mining Journal,

## RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1788.—Vol. XXXIX.

LONDON, SATURDAY, NOVEMBER 27, 1869.

(WITH SUPPLEMENT) (STAMPED .. SIXPENCE, UNSTAMPED .. FIVEPENCE)

**MR. JAMES CROFTS, STOCK AND SHAREBROKER,**  
No. 1, FINCH LANE, CORNHILL.

(Established 1849.)  
Mr. Crofts transacts business in the way of PURCHASE or SALE of every description of stocks, but particularly BRITISH MINES, at net prices. All orders with the utmost punctuality, and advice given as to the nature and eligibility of INVESTMENTS when required.

HOLDERS of mining shares DIFFICULT OF SALE in the open market may find purchasers for the same through Mr. Crofts' agency. Also parties requiring advice how to act in the disposal or abandonment of doubtful mining stocks may profitably avail of Mr. Crofts' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

**GREAT ROYALTON.**—The purchase of these shares is strongly recommended for a great rise.

**VIRTUOUS LADY.**—Special business either as BUYER or SELLER.

**MR. W. H. BUMPUS, STOCK AND SHAREDEALER,**

44, THREADENEE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:—

50 Australian United, £1 1/4 prem.	20 Gt. So. Chiverton, 30s.	40 Port Phillip, 25s. 6d.
10 Bwch Consols, £2 1/2.	10 Great Vor, £1 3/4.	20 So. Condurrow, 34s.
25 Bronfloyd, £3 1/2.	50 Gen. Brazil, 3s. 3d. pm.	100 Taquaril, 3s. 3d. pm.
50 Caldbeck Fells, 33s.	50 Gt. No. Laxey, £1.	10 Van, £38 1/2.
35 Chontales, 16s.	15 Hingston Down, 28s.	20 Van Consols, 36s. 6d.
20 Don Pedro, £3 8 9 pm.	10 Marke Valley, £7 1/2.	50 West Godolphin, 16s.
30 Drake Walls, 21s. 6d.	50 W. Drake Walls, 4s. 9d.	50 W. T. Croft, £1 1/2.
10 East Lovell, £2 1/2.	35 New Birch Tor, 12s. 6d.	5 W. Margaret, £14.
12 E. New Lovell, 14s.	50 No. W. Croft, 37s.	50 Wheel Crebor, 11s.
50 East Seton, £1 18s. 9d.	50 Panulillo.	75 West Maria, 33s.
15 Frank Mills, £3 1/2.	50 Pestarena, 23s.	2 W. Chiverton, £56 3/4.
100 Frontino, 22s. 6d.	100 Prince of Wales, 24s.	100 Yudanmut, 28s.

**MR. W. L. LAM WARD,**  
95, BISHOPSGATE STREET WITHIN, LONDON, E.C.

**MR. THOMAS SPARGO, STOCK AND SHAREDEALER,**  
224 and 225, GRESHAM HOUSE,  
OLD BROAD STREET, LONDON, E.C.

**JOHN RISLEY, (SWORN) STOCK AND SHAREBROKER,**  
48, THREADENEE STREET, LONDON, E.C.  
Bankers: London and Westminster, Lothbury.

**MR. Y. CHRISTIAN, STOCK AND SHAREDEALER,**  
11, ROYAL EXCHANGE, E.C.  
Bankers: Bank of England.

**MR. T. A. MUNDY, STOCK AND SHAREDEALER,**  
38, BISHOPSGATE STREET WITHIN, E.C.  
Bankers: City Bank.

**MR. WILLIAM SEWARD, STOCK AND MINING SHARE BROKER,**  
19, THROMMORTON STREET, LONDON, E.C.  
Every description of shares BOUGHT and SOLD at the best market prices.

**MR. JOHN MOSS, STOCK AND SHAREDEALER,**  
ST. MICHAEL'S CHAMBERS, 42, CORNHILL, E.C.  
Bankers: City Bank, Finch-lane, E.C.

**MR. C. A. POWELL, BRITISH AND FOREIGN STOCK AND SHAREDEALER,**  
No. 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.  
BUYER or SELLER of every description of negotiable securities at current market prices net.

Special facilities for transacting business in the shares of mines more prominently before the public.  
Anyone wishing to know what to do in CALDBECK FELS shares can be advised by me.  
Bankers: City Bank, Finch-lane.

**MR. T. ROSEWARNE, STOCK AND SHAREDEALER,**  
81, OLD BROAD STREET, LONDON, E.C.  
T. R. is in a position to give bona fide advice respecting the following shares:—

Bedford Consols.	East Caradon.	West Caradon.
Bedford United.	Hingston Down.	Wheal Maria and Fortescue.
Caldbeck Fells.	New Seton.	Wheal Seton.
Chiverton Moor.	Prince of Wales.	

Investors will do well to seek the advice of T. ROSEWARNE before they make an outlay of their capital, as his great practical experience will be of much service to them in selecting genuine mines, and avoiding those which would involve them in a certain loss.

Money advanced to any extent on good mining shares.  
Office hours Ten to Four. Bankers: Bank of England.

**SILK AND CO., HOME AND COLONIAL AGENCY,**  
32, REGENT STREET, PICCADILLY CIRCUS, W., and 36, MARK LANE, (No. 78), E.C., have BUSINESS in the following shares:—

Australian United.	East Lovell.	North Treskerby.
Brynpost.	East Seton.	Prince of Wales.
Bronfloyd.	Great Rock.	Rosewall Hill and Ransom.
Caldbeck Fells.	Great Vor.	South Condurrow.
Chiverton Moor.	General Brazilian.	Tamar Valley.
Cornwall Hematite.	Herodsfoot.	West Caradon.
Don Pedro.	Marke Valley.	West Seton.
Drake Walls.	North Croft.	
East Caradon.		

FRANK LEMMER, Secretary.

**WALTER TREGILLAS, 122, BISHOPSGATE STREET WITHIN, LONDON, E.C., DEALS** in all descriptions of ENGLISH and FOREIGN SECURITIES, either for immediate cash or the fortnightly settlement.

W. T. is always prepared to do business in the shares of the Brazilian Gold Mines, which, from long experience, he is well acquainted with. Taquaril shares are a first-class investment.

**MR. E. J. BARTLETT, STOCK AND SHAREDEALER,**  
No. 30, GREAT ST. HELEN'S, LONDON, E.C.  
Specially recommends shareholders to peruse the Third Edition of his pamphlet, entitled "How to Invest, and What to Select." Now ready.

BUYER or SELLER of shares in South Merilyn, East Lovell, Hammett, Nanteos, Frank Mills, Bronfloyd, and East Seton.

**MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 15 years), has FOR SALE the FOLLOWING SHARES, at net prices:—**

50 Anglo-Brazil, 3s. 9d.	20 Gt. No. Laxey, 17s.	30 So. Condurrow, 29s.
30 Australian United, 21s. 3d. prem.	5 Great Vor, £1 1/4.	5 Taquaril, 3s. 3d. pm.
20 Bronfloyd, £3 11s.	50 Gen. Brazil, 3s. pm.	5 Trelawny, £3 18s. 9d.
35 Chontales, 15s. 9d.	20 Hingston, 26s.	5 Tan-yr-Alit, £5 1/2.
10 Chiverton, £3 6s. 3d.	5 Hammett.	30 Untd. Mexican, £4 1/2.
10 Chiv. Moor, £3 16s. 9d.	10 Marke Valley, £7.	40 Wheel Crebor, 12s. 3d.
25 Caldbeck Fells, 35s. 6d.	25 New Lovell, 28s. 9d.	5 Wh. Mary Ann, £16 1/2.
20 Don Pedro, £3 11s. pm.	30 No. Treskerby, 13s. 9d.	50 W. Prince of Wales, 2s.
40 Drake Walls, 19s.	20 North Croft, 38s. 6d.	2 W. Chiverton, £56 3/4.
25 East Seton, 38s. 3d.	10 No. Roskear, £25.	30 West Caradon, 16s.
5 East Lovell, £2 1/2.	40 Nanteos Cons., 25s.	10 Wh. Kitty (Lelant), £11 1/2.
40 East Rosewarne, 2s.	35 Port Phillip, 26s. 3d.	2 West Frances, £38 1/2.
10 East Caradon, £6 3s.	25 Pestarena, 25s. 3d.	50 West Kitty (offer wanted).
30 Frontino, 21s. 6d.	2 Providence, £3 3/4.	
10 Great Rock, £7 1/2.	15 South Darren, 37s. 6d.	
20 Great Western, 38s.	50 South Grenville, 2s.	

W. M. strongly recommends the immediate purchase of HAMMETT and NANTEOS CONSOLS shares. A plan of Hammett and special report forwarded upon application.

WANTED TO PURCHASE—HAMMETT shares. State number and lowest price.

**MR. GEORGE BUDGE, STOCK AND SHAREDEALER,**  
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 20 years), is a SELLER at net prices of:—

2 Minera, £170;	45 Bwch Consols;	1 Devon Great Consols, £140;	10 Van, £39;
1 South Caradon, £342 1/2;	10 West Agar, 26s. 3d.;	70 Wheel Crebor, 12s. 9d.;	80 Redmoor;
50 Budnick Consols;	5 Great Wheel Vor;	75 East New Wheel Lovell;	80 East Rosewarne, 2s.;
2 West Frances, £40;	10 West Kitty (St. Agnes);	30 Holmhead and Kelly Bray, 31. 18s. 9d.;	100 Anglo-Brazilian, 9s. 9d.;
200 Sao Vicente, 2s. prem.;	50 Yudanmutana, £1 8s. 9d.;		

Mr. BUDGE can recommend the purchase of shares in a progressive mine, making profits and fast approaching a dividend state, and strongly advises the purchase of the shares at their present nominal price.

**THE PACIFIC MINING COMPANY.**—  
Mr. PETER WATSON is a BUYER or SELLER of shares in this company at close market price.—79, Old Broad-street.

**THE LONDON DAILY RECORD—**  
STOCK AND SHARE LIST.  
Published every evening at 5 o'clock.  
Forwarded by same night's mail to subscribers.  
Entered at Stationers' Hall, July, 1866.

Contains the latest closing prices of any share-list published; showing the rise and fall in railways, banks, foreign stocks, colonial securities, American securities, foreign railways; telegraphic, insurance, steamship, and miscellaneous shares; Cornish and Welsh mines, foreign gold mines, &c.

With remarks on the daily operations, and advice as to purchases or sales.  
Annual subscription, £1 1s.; by post, £2 2s.; monthly subscription by post, 4s.; single copy, 1d.; by post, 2d.  
Published by P. WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

**CORNISH AND FOREIGN MINES—**  
TO SHAREHOLDERS AND OTHERS.

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES." of Friday, Nov. 28, No. 560, V. 1. XL, price 6d. each copy, forwarded on application, contains information on the following mines:—

East Lovell.	New Lovell.	East Wheel Seton.
Great Rock.	Mineral Bottom.	Chiverton.
Don Pedro.	North Wheel Croft.	Bwch Consols.
West Caradon.	Wheal Jane.	East New Lovell.
Caldbeck Fells.	North Treskerby.	St. Ives Consols.
Bronfloyd.		Pacific Mining Co.

**INVESTMENT OR SPECULATION.—A SELECTED LIST OF** RAILWAYS, BANKS, MINES, COLONIAL SECURITIES, FOREIGN GOVERNMENT BONDS, &c., forwarded to bona fide investors on application, in addition to the high rate of interest many of the above are paying, there is now every probability of a great rise in market value.

PETER WATSON, STOCK AND SHAREDEALER, 79, OLD BROAD STREET, LONDON

(three doors only from Hercules-passage, entrance to the Stock Exchange).

Twenty-four years' experience.

(Two in Cornwall and Twenty-two in London.)

Bankers: The Alliance Bank, and the Union Bank of London.

References given and required (when necessary) in all the principal towns of the United Kingdom.

**MR. EDWARD COOKE, STOCK AND MINING SHAREDEALER,** 76, OLD BROAD STREET (and Mining Exchange), LONDON, E.C.

TO SHAREHOLDERS AND OTHERS INTERESTED IN CALDBECK FELS MINES.—E. C. having, at a considerable expense, had the above mine inspected by a late agent of the Duke of Devonshire, is prepared to forward a copy of the report on application, accompanied with a remittance of 10s. 6d.

E. C. is a BUYER of any number of Caldbeck Fels shares at market price.

Bankers: Alliance Bank.

**MR. W. H. CUELL, No. 42, CORNHILL, LONDON, E.C.**

**MATTHEW GREENE, STOCK AND SHAREDEALER,** 14, PINNER'S HALL, OLD BROAD STREET, LONDON, E.C.

MATTHEW GREENE is always in a position to buy or sell mining shares on the very best terms, either for cash or the regular fortnightly Stock Exchange settlements.

The practice of advertising shares for sale at fixed prices being highly prejudicial to the interest of both buyer and seller, and prohibited by the Stock Exchange, is not adopted; but M. G. has always buyers and sellers of all shares dealt in on the London markets.

The following are specially recommended as good to buy at present prices:—Van Consols, New Clifford, and Tamar Valley.

Office hours, 10 to 4.

Bankers: Bank of England.

Established Twelve Years—Twenty-four Years' Experience.

**MR. F. W. MANSELL, STOCK AND SHAREDEALER,** 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C. has the following SHARES FOR SALE:—

100 Anglo-Argent, 3s. 9d.	30 Kapunda, 17s. 6d. 1/2.	50 Tamar Valley (offer wanted).
50 Bedford Consols.	5 Marke Valley, 9d.	100 Van Con. (offer wanted).
35 Bronfloyd, £3 1/2.	50 Maudlin, £3 1/2.	2 W. Chiverton, £56.
50 Caldbeck Fells, 34s.	1 New Seton, £40.	50 West Maria and Fortescue, 30s. 3d.
15 Cape Cop., £10 1/4 pm.	35 New Lovell, £2.	10 West Godolphin, 16s. 6d.
1 Devon Gt. Con., £14s.	30 North Treskerby, 14s.	1 West Seton, £18 1/2.
15 Drake Walls, 18s. 9d.	50 No. Croft, £1 16s. 3d.	5 West Frances, £41.
5 East Basset, 15s.	3 North Roskear, £7 1/2.	200 Wt. Prince Wales, 3s. 6d.
25 East Caradon, £6 1/4.	1 Perran Wb. Vyvyan (£40 paid), £60.	5 Wh. Trelawny, £4 1/2.
10 East Lovell, £2 1/2.	150 Pestarena Gold, £1 13 9d.	15 Wh. Kitty (St. Agnes), £5 1/2.
50 East Seton, £1 16s. 3d.	100 Prince of Wales, 28s. 9d.	50 Wh. Chiverton, £218 9d.
130 Frontino, 21s. 6d.	75 Port Phillip, 6s. 3d. pm.	20 Wh. Grenville, 27s. 6d.
230 Gen. Brazilian, 4s. pm.	100 Port Phillip, 6s. 3d. pm.	5 Wh. Mary Ann, £17 1/2.
10 Great Laxey, £18 1/2.	340 Redmoor, 12s. 6d.	50 Wheel Crebor, 12s. 6d.
10 Great Vor, £12 1/2.	200 Rossa Grande, £1 pd.	50 Wh. Agar (offer wanted).
50 Great Retallack (offer wanted).	5s. pm.	30 Wh. Uny (offer wanted).
100 Hingston Down, 21s. 3d.	10 St. John del Rey, £16 1/2.	
	150 Sao Vicente, 1s. 3d. pm.	
	1 South Caradon, £340.	

Mr. F. W. MANSELL having returned from visiting the principal mines of Cornwall and Devon, should be consulted at once in the purchase and sale of shares.

F. W. M. advises great caution being used before entering into schemes brought out at great premiums—many are worthless, and others far too high in price.

At a cost of a few pounds mines may be privately inspected, and reliable information obtained, thus frequently saving heavy loss. Agents of the highest respectability and experience recommended by Mr. M.

BUYER of Llanarmon, North Treskerby, The Lovell, and East Seton at market prices.

Bankers: London Joint-Stock Bank.

**BARTLETT AND CHAPMAN'S "INVESTMENT CIRCULAR AND FINANCIAL RECORD" for AUGUST comprises—**

A Comprehensive Review of the Money, Stock, and Share Markets for the month; a Selection of the Best Investments, yielding Dividends of from 9 to 20 per cent.; a Statement of the Dividends paid in all Joint-stock and Cost-book Companies; and a notation of all the events of the month that are interesting to Investors or intending Investors. Gratis, and post free.

BARTLETT and CHAPMAN recommend the purchase of The Lovell, Great South Chiverton, Llanarmon, North Jane, Tin Valley, West Chiverton, Wheal Jane, and Lovell Consols shares. Full particulars forwarded on application, 36, Cornhill, E.C.

**LLANARMON LEAD MINING COMPANY (LIMITED).**—

Messrs. BARTLETT and CHAPMAN invite attention to the shares in this company, which has been formed to work the east continuation of the Old Nant lode, in Denbighshire, the west run of which returned profits exceeding £1,000,000, and the large horizontal deposit of lead or "flat," which has given enormous profits to four or five mines in the vicinity of Llanarmon, and which in that mine will be reached in 10 or 12 fms. further sinking.

The capital is divided into 10,000 shares of £2 each, fully paid up, so that no further liability will be incurred beyond the nominal value of the shares.

Samples of the ore (which are very rich), as also plans, can be seen at the office, 36, Cornhill, E.C., where prospectuses and forms of application may be obtained.

**INVESTMENT, LOAN, AND BANK AGENCY.**—

Established 1839.

Foreign Stocks, Colonial Government Bonds, Railway, Bank, Telegraph, Mining, and other Shares Bought and Sold.

Facilities of payment, and every information, afforded to Investors.

Full market prices given, free of commission, to parties desiring to realize.

LOANS granted for one year, or any shorter period, on Stocks and Shares having a market value.

DEPOSITS of all amounts received at 5 per cent. interest per annum.

Bank and Finance Agency Business generally undertaken.

RICHARD TAYLOR AND COMPANY, 12, Clement's-lane, Lombard-street, London, E.C.

**MR. CHARLES THOMAS,** MINING AGENT, GENERAL SHAREDEALER, AND AUCTIONEER, 3, GREAT ST. HELEN'S, LONDON, E.C.

**MR. CHARLES THOMAS CALLS PARTICULAR ATTENTION** to the NANTEOS CONSOLS MINES, the shares of which are now quoted at £1 1/4 to £1 1/2.

**MR. ALFRED THOMAS is at PRESENT on a TOUR of** INSPECTION in WALES, and will INSPECT and REPORT on any mine in the MONTGOMERY or CARDIGAN DISTRICTS.

Orders, addressed to Nanteos Mines, near Aberystwith, or to 3, Great St. Helen's, London, will receive attention.

**MR. W. H. L. LANYON** (Late of Kennall Gunpowder Company)

**GUNPOWDER MERCHANT, TRURO.**

**LEAD MINES AS AN INVESTMENT.**

Now ready, by J. H. MURCHISON, Esq., F.R.G.S., THE THIRD EDITION OF

**THE "LEAD MINES OF CARDIGANSHIRE AND MONTGOMERYSHIRE,"**—displays comprising VAN, DYLIFFE, LISBURN, EAST DARREN, SOUTH DARREN, CEFN BRWYN, and other important Mines. With a MAP, showing the position of the different Mines, arranged and drawn specially for this Pamphlet.

This edition is revised, with additional remarks, and more mines represented on map. Price 1s.

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Second edition, price 6d.,

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**COLONIAL AND FOREIGN PATENT LAWS.**

By GEORGE DAVIES, C.E.

Published at the Office for Patents, 4, St. Ann's-square, Manchester, by GEORGE DAVIES, C.E. (late John Davies and Son).

Established 1835.

**MR. HENRY MANSELL, STOCK AND SHAREDEALER,** 1, PINNER'S COURT, OLD BROAD STREET, LONDON, has FOR SALE the following shares, free of commission:—

20 East Caradon, £6 3 9	50 South Merilyn.	5 Tincroft, £20 1/4.
30 Hingston Down, 28s. 3d.	50 Bwch Consols, £2 1/2.	30 Caldbeck Fells, 34s. 6d.
100 The Lovell, 10s.	20 Frank Mills, £3 8s. 3d.	25 Chiv. Moor, £3 16s. 3d.
5 Cook's Kitchen, £18 1/4.	50 Bronfloyd, £3 1/2.	75 Drake Walls, 18s. 9d.
2 Devon Gt. Con., £14s.	20 Chiverton, £2 18s. 9d.	100 Prince of Wales, 28s.
50 Prince of Wales, 28s. 6d.	5 Ding Dong, £23 1/2.	5 Herodsfoot, £43 1/2.
40 No. Treskerby, 13s. 9d.	50 Nanteos Consols, £1 1/4.	20 Marke Valley, £7 1/2.
50 No. Croft, £1 16s. 3d.	150 Excelcor, 2s. 6d.	40 West Caradon, 18s. 9d.
20 Crobor, 11s. 9d.	25 Don Pedro, £3 11s. pm.	4 Wt. Chiverton, £56 3/4.
30 New Lovell, £1 8s. 9d.	50 Chontales, 16s.	20 Hammett.
5 Great Laxey, £19 1/2.	70 Frontino, 21s. 9d.	1 West Seton, £18 1/2.
10 East Lovell, £2 1/2.	100 Taquaril, 3s. 3d. pm.	5 Mary Ann, £16 1/2.
20 East Royallton, 5s.	10 Gt. South Chiverton.	10 Uny, £3 12s. 6d.
75 East Providence, 7s. 6d.	25 Virtuous Lady.	50 West Godolphin.
10 South Francis, £2 1/2.	50 East Seton, £1 16s. 3d.	50 Royallton (offer wanted).

NANTEOS CONSOLS.—This mine continues to improve, and shares should be purchased immediately to secure a large profit.

References exchanged.

Bankers: London Joint-Stock Bank.

**MR. J. B. REYNOLDS, 70, BISHOPSGATE STREET WITHIN, LONDON, E.C.**

**MR. THOMAS THOMPSON, STOCK AND SHAREDEALER, AND MINE AGENT, 12, OLD JEWRY CHAMBERS, LONDON, E.C.**

**ENDEAN, HOOKE, AND CO., STOCK AND SHARE DEALERS, 85, GRACECHURCH STREET, LONDON.**

Every class of marketable stock dealt in for cash or account. SPECIAL BUSINESS in Aberdaunt, Van, and other Welsh mines.

Investors are recommended to act cautiously, and to consult Messrs. ENDEAN, HOOKE, and CO. Consultation fee, £1 1s.

WANTED TO PURCHASE—Aberdaunt shares. State number and lowest price.

AN OFFER WANTED for 50 Tamar Valley.

**MR. T. E. W. THOMAS, STOCK AND SHAREDEALER, 3, GREAT WINCHESTER STREET BUILDINGS, E.C.**

Business operations in Mining Shares effected at close market rates.

Reliable information afforded upon most of the Welsh lead mines.

Daily Price Lists to applicants.

Mr. THOMAS begs to remind his customers of the opportunity that still exists of purchasing, through him, the shares of the Nanteos Consols Mining Company (Limited), and fully-paid £1 shares, at 25s. per share net.

**MR. J. J. REYNOLDS, 4, GREAT WINCHESTER STREET BUILDINGS, OLD BROAD STREET, has FOR SALE:—**

20 Bronfloyd, £3 11s. 3d.	1 W. Chiverton, £57 1/2.	15 Budnick, £2 7s. 6d.
5 Wheal Buller, £7.	10 Wheal Crebor, 13s.	1 Wheal Seton, £30.
10 Chiverton Moor, £4.	10 No. W. Croft, £1 1/4.	1 West Frances, £40.
5 East Caradon, £6 5s.	5 Herodsfoot, £45.	10 Marke Valley, £7 1/2.
10 Caldbeck Fells, 35s.	20 Prince of Wales, 28s.	1 Devon Gt. Con., £140.
5 Cook's Kitchen, £18 1/4.	25 Virtuous	

**BICKFORD'S PATENT SAFETY FUSE**

Obtained the PRIZE MEDALS at the "ROYAL EXHIBITION" of 1851; at the "INTERNATIONAL EXHIBITION" of 1862, in London; at the "IMPERIAL EXHIBITION" held in Paris, in 1855; at the "INTERNATIONAL EXHIBITION," in Dublin, 1855; and at the "UNIVERSAL EXPOSITION," in Paris, 1867.



**BICKFORD, SMITH, AND CO.,** of TUCKINGMILL, CORNWALL, MANUFACTURERS OF PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—**EVERY COIL OF FUSE MANUFACTURED BY THEM HAS TWO SEPARATE THREADS PASSING THROUGH THE COLUMN OF GUNPOWDER, AND BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS AS THEIR TRADE MARK.**

ESTABLISHED MORE THAN HALF A CENTURY.

**THE TAVISTOCK FOUNDRY, IRONWORKS, AND HAMMER MILLS,**

which have been carried on for more than half a century by

MESSRS. GILL AND CO.,

and obtained a

HIGH REPUTATION FOR  
**SHOVELS AND OTHER TOOLS**

as well as for

**ENGINEERING AND FOUNDRY WORK**

have been purchased by

**MESSRS. NICHOLLS, MATHEWS, AND CO.,**  
BEDFORD IRONWORKS, TAVISTOCK.

For thirty years Messrs. NICHOLLS, MATHEWS, AND CO., have been the proprietors of the latter works, but have now removed to the

**TAVISTOCK FOUNDRY,**

where, having the advantage of a never-failing stream of water of upwards of 200-horse power, they will have increased facilities for speedily and satisfactorily executing all orders entrusted to their care.

Manufacturers of STEAM ENGINES and BOILERS, on the newest principle pump work, brass and iron; hammered iron shafts, of all sizes; miners' steel and iron tools.

N. M. AND CO. have had a LARGE EXPERIENCE in PREPARING MACHINERY for FOREIGN MINES, as well as selecting competent mechanics to erect the same.

N. M. AND CO. have always a LARGE STOCK of SECOND HAND MATERIALS.

**F. N. GIBBORNE'S PATENT MECHANICAL  
BALANCE-WEIGHT SIGNALS FOR MINES, &c.**

THESE SIGNALS supply a want long felt in giving INSTANT COMMUNICATION in MINES at SEVERAL PLACES at the SAME TIME without the aid of electricity, but by a single rod or chain; so that a degree of safety is ensured hitherto unknown.

The price is also very low, and the mechanism so simple that any ordinary mechanic could put it in order if out of adjustment.

The same patent, as applied to ships, has received the approval of the Chief Engineer, Chatham Dockyard (vide Times, Aug. 13, 1868).

SOLE AGENT FOR MINERS:

Mr. GEORGE B. JERRAM, ENGINEER, WASHINGTON BUILDINGS,  
BRUNSWICK STREET, LIVERPOOL.

N.B.—Mr. JERRAM is now visiting the different mines with working models.

**THOMAS TURTON AND SONS,**

MANUFACTURERS OF

CAST STEEL FOR PUNCHES, TAPS, and DIES  
TURNING TOOLS, CHISELS, &c.

CAST STEEL PISTON RODS, CRANK PINS, CON-  
NECTING RODS, STRAIGHT and CRANK

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FORGINGS of EVERY DESCRIPTION.

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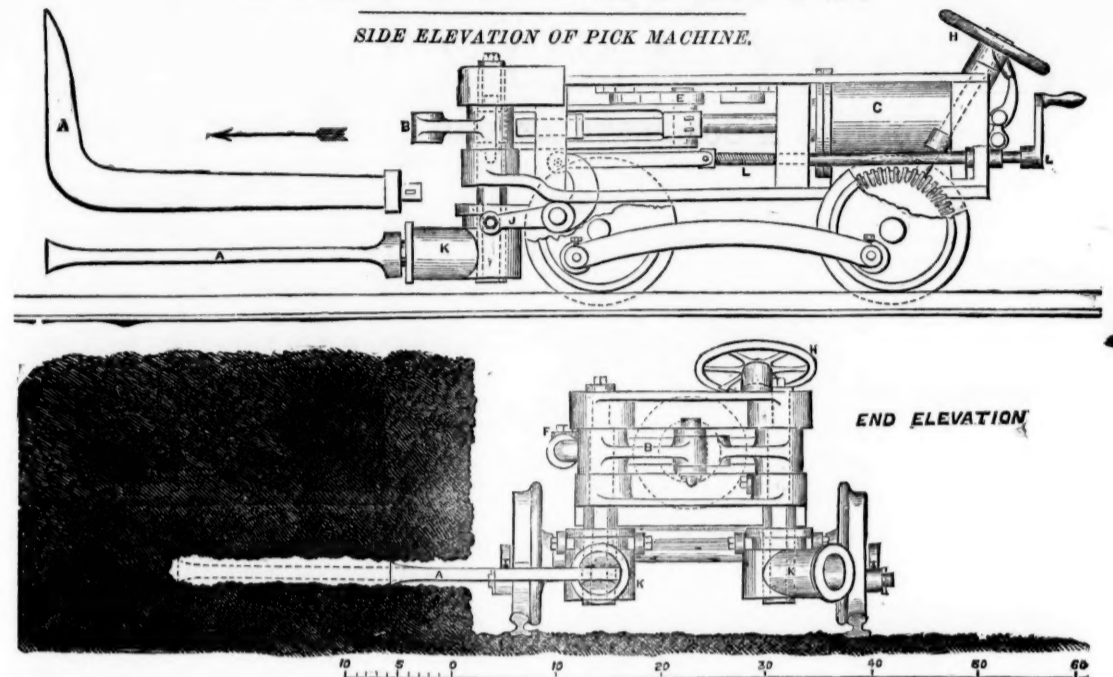
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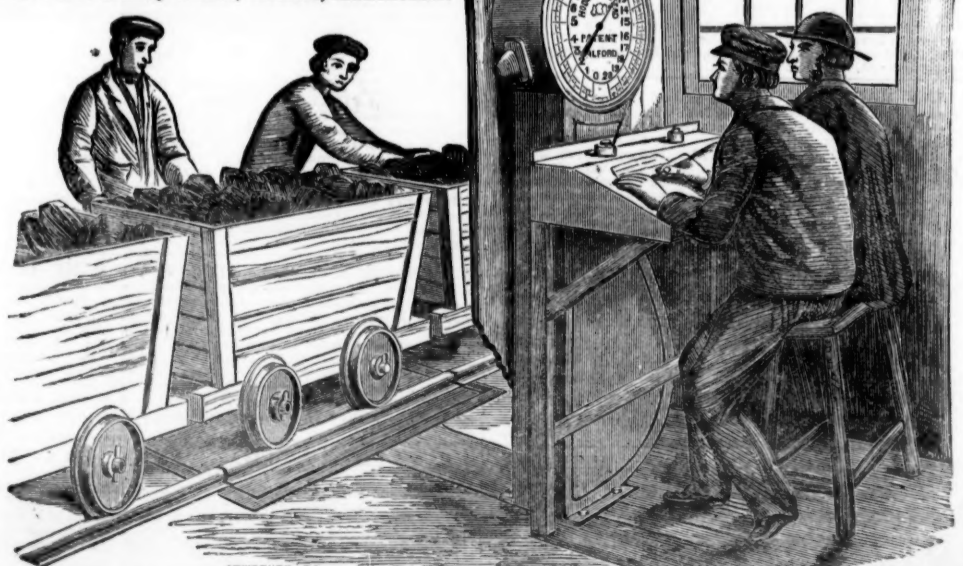
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## Original Correspondence.

## COPPER MINING IN LAKE SUPERIOR.

SIR,—Through the extreme depression copper mining in this vicinity is reduced to a small business, several mines are closed, and those working are only employing a very few men. The Flint-Steel Mining Company started last spring to put up about 16 heads, somewhat like the Cornish stamps, with a powerful low-pressure engine, under the strong expectation that the tariff would bring up the price of copper, but seeing it has had but very little effect the erection of the stamps is suspended for the present, the mine remaining full of water. Pretty much of the same class was the Caledonia Mine, which resumed work last spring, with a view of doing heavy business, but the continued depressed state of the copper market seems to discourage them also. Both Caledonia and Flint-Steel Mines are valuable properties if once got under way; the former will likely employ a dozen miners this winter opening ground. Knowlton, immediately east of those mines, has been working on a moderate scale, and has about paid its way; it is a good property, if worked on a proper scale. The same may be said of the Agama, Mass, and Evergreen Mines, which are idle. Ridge (immediately east of those mines), embracing the same lodes, is worked by about 50 miners, and more than pays expenses; a valuable property, and is in good hands, with good management. Aztec Mine last year yielded beyond all expectation, and more than paid its way. About a couple of months ago they introduced nitro-glycerine in the place of powder, and so far with great success. In charging holes they first fill the hole with water, then with long-stem funnel pour in the nitro-glycerine, which goes to the bottom instantly, and remains there; then take a double tape, or water-proof fuse, fasten to one end a small cartridge, (say) 1/2 in. in diameter and 2 in. long, with a cork in each end, filled with rifle powder, well greased to make it water-tight, and lower it down into the nitro-glycerine, fire the fuse, which will explode the cartridge, and set on fire the nitro-glycerine. It has been said nitro-glycerine will fetch out the rock, no matter in what direction the hole is drilled. This, I beg to say, is not the case; it is necessary, as is said amongst miners, the hole shall be drilled kindly—i.e., the burden shall not be too strong. Nitro-glycerine is much stronger than powder, and if nitro-glycerine could be tamped upon, as miners do to powder, it is hard to say what duty nitro-glycerine would do. Water is used in place of tamping, in order to avoid premature explosion. Capt. Buzzo, of Aztec Mine, said his 20 miners were equal to 50 with powder, and from what I have seen there I believe it; besides, the rock blasted out by nitro-glycerine is much easier broken into smaller pieces than that blasted by powder. For instance, a mass of copper thrown out by nitro-glycerine is much easier cleaned of poor rock than one by powder. And as to the danger in using nitro-glycerine, I cannot see there is half so much as by tamping with a bar of iron on the naked powder, as I have often witnessed miners doing. Nitro-glycerine is the stuff in large openings, such as sinking and stoping under hand, or in any water hole where the oil can be poured in. Cartridges tamped upon with clay in sand would answer excellently, and do good duty; but in case of mis-fire, how could that hole be cleaned out? No man should dare touch it in any shape, neither attempt to drill another hole near by, for anything of that kind might explode it. When a hole mis-fires when filled with water, the fuse and cartridge fastened to the fuse is pulled out, and another put in its place. Occasionally this occurs at the Aztec, and so far all has proved well. In very cold weather they have two boilers, to set on stoves, a little larger and same shape as the nitro-glycerine can, to warm water, and set the frozen can of oil therein, thereby thawing the frozen oil by warm water, instead of setting the nitro-glycerine can on the fire, as was done at the Phoenix Mine, Eagle River, L. S. Nitro-glycerine costs here about \$1.50 a pound.

Ontonagon, L. S., Oct. 30.

A CORNISH MINER.

## VIRTUOUS LADY MINE.

SIR,—Every part of the mine being worked upon has very considerably improved since last week, and shall I astound the shareholders by being able to inform them that in one of the pitches the tributaries are breaking down rocks of copper ore, one rock weighing more than 1 ton? I do not say it is solid copper, but it is good profitable work throughout, and more than one-half of the work is pure copper, of the richest quality. This is, indeed, a marvellous mine, and is fast getting beyond my weak powers of description, as I am entirely nonplussed for language to keep pace with the extravagant remarkableness of the case. In five different places are already working, and as yet we have not made what I call a real start; this is simply a wee bit of introductory. I find the shaft is 20 fathoms deep instead of 17. We are down 17 1/2 fms., and are now dragging away steadily at the immense excavations known as the Buckland Great Bottoms and Up the Straits. It is in these workings that I have been promised so much, even to almost courses of ore, to commence operations upon. We shall see; and I must confess that nothing will now astound me. Excuse my frequent allusions to the ore subject, but I feel confident that not a single mining man who has, in direct or indirect knowledge of mining, and brains and education sufficient to warrant his giving a reliable opinion, can doubt, upon an inspection of that property, that we shall have one of the richest copper mines ever yet discovered in England.

5, Abbey Mead, Tavistock, Nov. 25.

Nov. 26.—(Telegram).—“Another entirely new discovery; blasting down half-ton rocks of solid richest ore. Shares to-day 31, worth double.”—T. J. BARNARD.

[Some other letters referring to this mine appear in the Supplement accompanying this week's Journal.]

## ROSEWALL HILL AND RANSOM.

SIR,—The shareholders of this mine are respectfully desired not to send their proxies for the use of the committee at the next quarterly meeting, to enable them to confirm the system of management as yet we have made what I call a real start; this is simply a wee bit of introductory. I find the shaft is 20 fathoms deep instead of 17. We are down 17 1/2 fms., and are now dragging away steadily at the immense excavations known as the Buckland Great Bottoms and Up the Straits. It is in these workings that I have been promised so much, even to almost courses of ore, to commence operations upon. We shall see; and I must confess that nothing will now astound me. Excuse my frequent allusions to the ore subject, but I feel confident that not a single mining man who has, in direct or indirect knowledge of mining, and brains and education sufficient to warrant his giving a reliable opinion, can doubt, upon an inspection of that property, that we shall have one of the richest copper mines ever yet discovered in England.

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## TAVARONE COPPER MINES (LIMITED), ITALY.

The rich mines of Chili and Cuba have seen their palmiest days, whilst the importation of copper is rapidly falling off, and the consumption daily increasing. In Italy there are numerous rich mines for copper, and the quality of the ores is most exceptionally good, and the lodes are productive close up to the surface. This is the case with the “Tavarone,” situated in the Apennines, about eight miles north of the Mediterranean, and some 30 miles south-east of Genoa. The lodes are reported to be about 3 to 4 ft. in width, and run within 10° of north and south and east and west. The samples of the ores broken from various points are found, on assay of 10 samples, to yield from 14 up to 71 per cent. of metal, and large quantities can at once be raised, the undertaking approaches so near a positive success as the nature and character of mineral deposits will admit. The mines have been purchased by gentlemen connected with the copper trade of this country, chiefly on account of the large quantities of the metal that can be brought to the market, and the certainty, with a small outlay in cash, of securing a substantial and early prize. The promoters are resident in London, Bristol, Swansea, Cardiff, and Birmingham, in this country, and at Genoa, in Italy. The company will be constituted upon the Limited Acts of 1862 and 1867, and shares fully paid-up of £1 each will be issued to bearer—thus avoiding the necessity of registration. Thirty thousand pounds will at first be issued, but powers are taken in the Articles of Association to increase the capital to 50,000, but the additional 20,000, will, in all likelihood, never be required. The concession is conveyed to the company for 20,000, in shares and 10,000, in cash, the proprietors declining to take a cash consideration in payment. The lodes are continuous, and can be traced throughout the company's lands, which extend in area three and a half by two miles, held in perpetuity direct from King Victor Emanuel, at a dead rent of 20 frs. per square mile, and free from all other dues or royalties. There is every encouragement given to mining enterprise; labour is both abundant and cheap; materials to be had in any quantity, and of the best quality; carriage of ores and machinery from the shipping port of Sestri about 12 frs. per ton; the average yield of ores is fully 38 per cent.; water in abundance, and throughout the year; timber growing upon the concession, and the climate everything that can be desired, with an absence of rain fully ten months in the year.

The ore has been assayed by Mr. W. White, of Threadneedle-street, and the average of ten samples was 39 per cent. for copper; the several assays being—No. 1, 31.4 per cent.; No. 2, 63.6 per cent.; No. 3, 14.2 per cent.; No. 4, 26.1 per cent.; No. 5, 16 per cent.; No. 6, 28.3 per cent.; No. 7, 52.3 per cent.; No. 8, 54.8 per cent.; No. 9, 32.1 per cent.; and No. 10, 71.5 per cent.

Mr. White writes:—“The associated elements are iron, lime, sulphur, carbonic acid, silica, and arsenic. I find neither lead, silver, nor gold. The gangue is chiefly quartz, in a desirable state of friability, and offering but slight impediment to working. As will be perceived, the average yield of copper upon the specimens is 39 per cent. It remains for me to add that the specimens themselves were selected strictly with a view to obtain a fair average of the bulk.”

In Sonora, Mexico, rich surface gold diggings have been discovered, and parties are preparing to leave Arizona for the new mines, having been promised protection by the Mexican Government. Rich gold discoveries are also reported on the Finlay branch of Plate River, in British Columbia.

## Meetings of Mining Companies.

## PACIFIC MINING COMPANY (LIMITED).

One of the most important and influential meetings that has ever been held in connection with the inauguration of a mining enterprise took place at the London Tavern, on Thursday, to hear from Mr. George Batters the results of his recent personal inspection of mineral properties in California and Nevada, more particularly those which the above-named company have acquired. Upwards of 100 of the leading members of the Stock Exchange were present, and many others interested in mining.

Mr. GEORGE BATTERS (who was very warmly received) prefaced his observations by stating that he proceeded by way of Quebec, and crossed by the Union Pacific Railway, to the great centre of the mining operations, which was the immediate object he had in view in undertaking the journey. There was no parallel of late years in ancient or modern times to the influences which the pursuit of gold had had in directing the stream of population to California. Before the discovery of the auriferous deposits in that region we were in utter ignorance of its physical character, and almost of its geographical position. The two rivers which pour into the Pacific from the Sierra Nevada mountains, rising to an altitude of about 13,000 ft. above the level of the sea, flow for a considerable distance through a comparatively barren country, although in places the mountains were clothed with magnificent primeval forests. In the lower districts the valleys were extremely rich, yielding agricultural produce to an extent almost beyond credence. But a few years had elapsed since it was found wheat could be raised in these valleys, and yet now California was the second wheat-producing State in the Union, and was at the present time affecting the price of corn in the London market. The connection of these great rivers with the first discovery of gold was, however, the subject to which upon the present occasion he wished to direct particular attention. In 1848 gold was first found at the junction of these two great rivers—the America and the Sacramento—and, like all great discoveries of precious metals, it was to be ascribed to chance rather than to scientific investigation and research. The yield of the precious metals during 1855 amounted in value to \$65,000,000, or 13,000,000 sterling; and since that period upwards of 200,000,000 sterling has been returned, and was now in circulation in the commercial world. The gold-producing area appears to be limited, being, doubtless, confined between Sierra Nevada and the great rivers. In 1852 London was flooded with companies formed for working the gold mines of California, but from ignorance of management, capidity, and injudicious expenditure, the whole of them, without a single exception, failed to return a single shilling. Subsequently discoveries of silver of enormous value were made in Nevada, and from the Comstock lode alone something like 20,000,000 worth of silver has been returned, and from the appearances of the mine when he inspected it, about two months since, there seemed every prospect of silver being returned to the value of another 20,000,000. In one mine which he inspected—the Yellow Jacket—profits were being made at the rate of about 100,000 per annum, and the mine was not more than 900 feet in depth. He saw in this mine one stop that was being worked 24 ft. wide, producing stuff worth from \$150 to \$200, or 30l. to 100l. per ton as broken. Undoubtedly these were the richest silver mines in the world, and the lodes were of the highest temperature of any lode at present being wrought. The men, however, engaged in the workings enjoyed excellent health, and are able to work eight-hours “core.” Labour was somewhat dear, and there was a certain amount of demoralisation, owing to the excess of wealth produced in the district; but this time and experience would, there was no doubt, soon sober down. There were other exceedingly rich silver mining districts in Nevada besides that of Virginia and Golden City; and, as to their mining, he must congratulate them upon the mode in which the mines were worked, every detail being conducted with great care, and without regard to cost. In some mines the timbering work was more like cabinet-work than ordinary mine timbering. The shafts were perpendicular, and the ordinary mode of hauling was by means of horizontal engines and wire-rope, not much unlike ordinary colliery drawing in different parts of this country. The general working was the same as that in Cornwall, but crushing and amalgamating were now being reduced to a more perfect system. In Austin City and Belmont, where there were some splendid lodes, he found the mode of working in the same way as in Virginia City, but in White Pine the system was much more irregular, the strata being chiefly limestone, and the results less uniform in character. The durability of the productive character of these silver mines might be judged from the fact that some time since, after the Comstock lode had yielded enormous returns, a hard bar of ground was entered, and it was feared the lode would cease to return ore, but subsequent explorations in depth had given a new life to the mines, the Yellow Jacket being the most remarkable instance. For some years the operations in the gold mines were confined to washing or “placer” mining; then attention was directed to working the beds of rivers, which, strange to say, were found on the tops of mountains, exhibiting the effects of enormous upheavals. As these works were prosecuted co-operation was found to be necessary, and the individual system of working gave place to the more effective and comprehensive system of hydraulic washing and ordinary quartz mining. The hydraulic works were now being carried out upon a very large scale, as from this description of mining about two-thirds of the return of gold were now being made. Aqueducts were constructed round the mountains for a considerable distance, in some cases as much as 50 or 60 miles. A fall was obtained, and the water was conveyed in pipes to the “facings” on the cement, gravel, and sand to be operated on. Such was the power thus obtained that the very mountains were worked away. At one place he visited the “facings” must have been 1000 ft. wide, and boulders, gravel, and sand were made to roll through an ex-aqueduct, or stoneduct, to the valleys, a distance of 1000 or 1500 ft., and a distance not exceeding one mile, the gold being collected by means of quicksilver and blankets. Quartz mining also was being carried out systematically, and upon a very extensive scale, one-third of the gold returns from California being thus obtained. The Amador Mines had been worked to a depth of 1200 feet, and large returns and profits were still being realised, the general prospects being in every respect as promising as during any period of the working, although it had returned many hundred thousand pounds. In Grass Valley, the Allison Rancho Mines had been very successful, and Eureka, Idaho, and Union Hill were also being successfully explored in this small valley, and there would appear to be a great, permanent, and prosperous future for quartz mining in Grass Valley. At the Eureka, where he went underground, he found a depth of 500 ft., certainly the best level in the mine—this mine had given for the last four years a profit of about 70,000l. per annum; this was not a solitary instance of successful quartz mining in this district, for when the American found that any particular mine was unprofitable he soon abandoned it, for not being very “plucky” he did not like to ride a deep shaft. He (Mr. Batters) was underground at Idaho and Union Hill, where considerable profits were being made, and he had no hesitation in saying that Union Hill presented every prospect of becoming equal to Eureka, for apart from every other consideration, it was actually richer than Eureka was at the same depth. He had just received a telegram informing him that the profit made last month was 6000l., or \$30,000, and the prospects of a permanent and progressive increase were certainly all that could be desired. The extent of the claim was somewhat about 3000 ft., or 500 fathoms long. Union Hill was one of the best mines he had purchased on behalf of this company; and the Buckeye property, which he carefully inspected, consisted of a hill of about 1500 ft. above the present level of the Yuba River. There a deposit had been discovered for about 1000 feet wide, its entire width being unknown, the whole body of which was being washed away by the hydraulic process; it was operated upon by first being disintegrated by the action of gunpowder upon the “facing”; small tunnels were driven in and T-pieces formed, the rock then fell in, and the water was let down “flumes” until it reached the River Yuba, when the precious metal was collected. The whole process was exceedingly simple, and the present returns from this mine alone yielded a profit of 1200l. per month. This property he had also succeeded in purchasing upon exceptionally reasonable terms; and he had no hesitation in saying that, calculating the extended operations contemplated, this hill could not be removed in the manner described during at least the next 30 or 40 years. Their agent, Capt. Barratt, in his (Mr. Batters's) presence went to the “facing” in different places, removed the gravel, and merely washing it in a pan, as a miner would do in a Cornish gold mine, gold in appreciable quantities was produced. While upon this subject, he could not do better than to quote from an excellent work by Mr. T. F. Cronise, upon the “The Natural Wealth of California,” where the writer states that—“It is estimated that the gold washed from a group of hydraulic pressure at Buckeye, Nevada county, averaged a gross yield during the past winter and spring of \$150 per day; the Kennebec Company, at the same place, \$250, and another \$500. At French Corral, near by, Eddy and Co. took out \$30,000 in a run of one month; while the Dookrum Company, operating at the same place, have cleared \$20,000 within the past two years.” These are not cited as extreme cases, but as instances about what are the average results obtained from the better class of claims in that section when they are once opened, and of which there are a large number in Nevada county.” The result of his enquiries led to this conclusion—that, generally speaking, the Americans had the good sense to keep to themselves their wonderful mines in California and Nevada, so that those who came to this country with “bala” to sell, which were represented to be making wonderful profits, were the merest adventurers; and should be avoided, being known to respectable Americans by the appropriate title of “loafers.” At his time of life it would not suit him to bring out a speculation, and he would rather that none of those gentlemen whom he now had the pleasure of addressing should take an interest in this enterprise, if by so doing they should be induced to associate themselves with others. Besides these two mines—the Buckeye and the Union Hill—the company would acquire Lander Hill, near Austin City, Nevada. Mining there was at a low ebb, most of the miners having deserted their camp and gone over to another district, called White Pine, where gold had been discovered in the limestone. He discovered this mine by accident, and was much interested in it from seeing some beautiful rocks being brought to surface. He had no idea at the time that they would sell it at any price, and he had no authority to go underground. He, however, managed to inspect it, and afterwards Capt. Barratt went underground, and so satisfied was he (Mr. Batters) with Capt. Barratt's report that he set to and succeeded in purchasing it, although not without considerable difficulty. Therefore, the company possessed Buckeye, which was making a profit of 1200l. per month; Lander Hill, which was making a profit of 600l. per month; and Lander Hill, which was making a profit of 800l. per month. Without taking into consideration the fact that the profits from each of these mines could be easily and rapidly increased, the present aggregate profits amounted to 2500l. per month, or 7500l. per quarter, or 10s. per share per quarter, equal to 2l. per share per annum, the capital of the company being 150,000l., in shares of 10l. each. What induced him to purchase Lander Hill was this—that under the bottom level a “sump” had gone down, where there was a very fine lode, which Capt. Barratt fully described to him. He (Mr. Batters) had no hesitation in saying that if the lode should be intersected 50 ft. below the present workings,

which there was every reason to confidently believe would be the case, Lander Hill would at once become a property, *per se*, of treble the value of the entire issue price. He was not prepared to put that forward as a promise, nor did he wish what he was about to say to be construed into one, but he thought it probable that the shareholders in this company would have the pre-emption to the Eureka Company if he should succeed in purchasing the Eureka Mine. He carefully inspected that mine, and naturally enough they wanted a large sum of money for it. He found, also, they were paying a very considerable interest for money in California, as much as 2 and 3 per cent. per month being paid for advances upon bullion; therefore, he thought it was not a very great stretch of conscience if he succeeded in purchasing the mine upon a basis of 20 or 30 per cent. upon the present profits, keeping in view the prospects as regards permanence. He did not perfectly succeed; first of all they did not want to sell any of it, and then, after a great deal of negotiation, they thought they might, perhaps, be induced to sell one-half. He went to San Francisco, and saw several of the shareholders, and also to New York, where he saw the banker, also a large shareholder. That gentleman said he did not desire to sell his shares, as the amount he (Mr. Batters) offered would be obtained in three years by the profit from the mine, and by that time it would in all probability be twice as rich as it was at the present time. He (Mr. Batters) pointed out that as the Americans had enormous facilities for turning over their money at usurious rates of interest, a property which might be good enough for them to sell might be equally good for English capitalists to buy. After a good deal of trouble and difficulty he succeeded in getting a document signed by 3500 out of 4000 in favour of the sale of the mine, and he hoped to succeed in obtaining the remaining 500, in which case the selling price would be 250,000l. That would look like 33 per cent. upon the capital. He then called upon Capt. Barratt to read his reports.

The reports were as follows:—

Grass Valley, California, Sept. 24.—In conformity with your instructions, have carefully examined the Buckeye Gravel mining properties, and the following are my remarks thereon:—The Buckeye Gravel mining claims, or mining properties, are situated in Bridgeville mining district, Bridgeport township, about 16 miles north of Grass Valley, Nevada county, California. The Buckeye claims are 4400 ft. long, by 1600 ft. wide. The slope or face of the gravel bed on which they were working when I was there I calculated to be 160 ft. high, divided as follows:—From the bed rock, up 50 ft., the bed is composed of pebbles, cemented with granite or gray sand; above that comes in a bed of pipe-clay 20 ft. high, and the remaining 90 ft., up to the surface, is composed of pebbles and sand; the whole is auriferous, but the bottom level (the blue bed) is the richest, and yields considerable gold. It is impossible to arrive at the yield per ton, as the gold is not evenly disseminated, but from samples (parts of dirt) I washed from the bottom level I am quite satisfied the yield is enormous, and the quantity of gravel or bed matter is sufficient to last by the present rate of extraction (force 50 Chinamen) more than 70 years; but should this property come into English hands with much greater force, there will be sufficient gravel for 40 years to come. At the present slow rate of extraction the present company paid in dividends during last year \$72,000, equal to 14,400l. During that year they were at great expense bringing in the new tunnel, which on its arrival at the breast or face of the gravel bed will be about 30 ft. below the bed of the gravel deposit, so as to put in a new run of flumes. This tunnel, ere this, has reached the face of the gravel bed, and hydraulic can be done with increased yield, and with less expense. I have no doubt the yield of gold will be double or treble that of the present. The yield of gold to the present, or to the end of last year, amount to about \$600,000. The present yield per annum is about \$140,000, and if a new company take the property with the increased facilities now offered by the new tunnel, the yield can be trebled, and the profits increased to more than three times the present amount. There is every facility for working this mining property. The company have the right of more than three miles of the Yuba River, and they have flumes laid all that distance. Water is an item that is rather expensive, but when we take into consideration the enormous yield of gold that can be obtained, that expense does not interfere with the working of such concerns. I am fully persuaded that this hydraulic mining property is exceedingly good, and can be very profitably worked. Look- ing much as they do at present, I am confident it is worthy the attention of English capitalists, and I can conscientiously recommend it as a good investment.—JAMES BARRATT.

Grass Valley, California, Sept. 25.—In accordance with your request, I have carefully examined the Union Hill Gold Mine. The Union Hill Gold Mine is situated about two miles south-east from Grass Valley, Nevada county, California. The engine-shaft is sunk to the depth of 200 ft. on the dip of the lode, which bears about east and west, and dips south about 7 ft. in a fathom. The 160 ft. level has been driven west 360 ft., and east 450 ft. from the engine-shaft. Considerable stoping has been carried on in the back of this level; most all the stuff is taken away to the surface, in the 200 ft. or bottom level the western end is driven 230 ft. from the engine-shaft, and 160 ft. east of it; very little stoping has been done in this level, but there is considerable quartz ore in reserve. The yield of this gold mine, like most of the mines of the district, is low at shallow depth, but when greater depth is attained the yield of gold increases. The lode throughout the mine is generally large in the bottom level; the lode averages 5 ft. wide, with a ley or yield of from 8 to 12 to the ton. Although the yield is low, comparatively speaking, there is an abundance of auriferous quartz rock on the hill or stamps. There are one or two indications like this. There is more water than in many of the neighbouring mines at the same depth, which I consider a sign of a porous, large, and continuous lode. There is another indication a few fathoms west of the engine-shaft in the bottom of the level which I think is favourable, that is the lode is mixed with more oxide of iron than at any other part of the mine. There is not so much iron pyrites or sulphurets as I would like to see, but as the mine gets deeper there will be sufficient. The length of this mining grant is 3000 feet, and the 200-ft. level is on the line run the new mine, and the 160-ft. level is 100 ft. level is reached the lode (quartz) will be richer in quality, and that the mine will greatly improve. It is a mining property, from the indications in the present mine, that warrants active prosecution, and I do not hesitate to recommend it to English mining capitalists as a very good investment for capital.—JAMES BARRATT.

Austin, Nevada, Oct. 13.—Agreeably with your request, I have thoroughly examined the Buel North Star Silver Mine. The mine is 1000 ft. long, situated in Lander Hill, near the town of Austin, Nevada, and is sunk to the 400 ft. level; it has two shafts, one on the course or dip of the lode, and the other perpendicular to it, for the purpose of raising the ore from the 400 ft. level to the surface. At the 400 ft. level a cross-cut has been driven, and intersected a lode bearing west-north-west and east-south-east, and dipping northerly about 9 feet in a fathom. This lode has been rich; and in the back of the 400 ft. level in the slopes it is at present about 2 ft. wide, of very rich ore for 270 ft. long. There is yet considerable rich ore between the 300 and the 400 ft. levels. The sump, or engine-shaft, is sunk 140 ft. below the 400 ft. level, and all the lode is standing whole from the bottom of the 400 ft. to the bottom of the sump, or sink. If the mine will be worth four times the money asked for it. In sinking the perpendicular engine-shaft it will intersect, within a 1000 feet deep, three other known productive lodes. Last year the mine gave, or produced, 1630 tons of ore, yielding \$224,050, equal to an average of about \$217 to the ton, or 43l. 8s. per ton of ore. The quantity of ore can be greatly increased. This mine has got a pumping-engine, drawing-engine, two reduction-works, one 10-head stamps, driven by steam, six amalgamating barrels, five floating or churning furnaces, five blinding machines, seven fine horses, two mules, and everything required for the mine and the amalgamation of its ore. The Metcalf reduction mill, in operation at present, is situated about 5 1/2 miles from the mine. The New York or Lander Mill is situated in Austin, about 3/4 mile from the mine; but it has nothing erected on it, although, when required, it can be put in operation. This mine paid last year \$70,000, or 14,000l. profit. I consider this to be a very good mine, and, if worked with a little activity, can be made to yield double the amount it does at present. Looking at all the different points, and the capital facilities of this mine, I consider it one of the best mining properties offered to English mining capitalists; and when the mine is further developed it will be found a very lucrative and profitable concern; and I can recommend it, feeling assured it will become one of the best silver mines of Nevada.—J. BARRATT.

Mr. H. L. PHILLIPS asked if there was any doubt as to the titles of these properties?—Mr. BATTERS said that was a very proper question, and in reply he might state that for the Silver Mine they possessed a title in the form of a United States patent—a description of security unknown in this country, except under the Encumbered Estates Act: it was an absolute Government title, in perpetuity. They had something more in the background in respect of this mine, inasmuch as they had about 10,000 ft. of other lodes, or which they had location titles. A United States patent was really a freehold in the mines. There was no surface damage whatever to pay, and no royalty to Government or any one else, but of course subject to the small taxation of the country. The United States Government offered every encouragement for mining, and the mining law much resembled the old Mexican code. The titles to the other properties were location titles, freehold and in perpetuity.

Mr. T. C. MUNDY asked what was the average yield of gold per ton of rock, as washed down by the hydraulic process?—Capt. BARRATT said it was difficult to tell. It was a bed of some 1600 ft. wide and 160 ft. long, containing gold to the extent of 1, 2, and 10 ozs. per ton; and there was a pipe above it, consisting of a sandy auriferous accumulation.

Mr. RUDGE asked whether labour was dear?—Capt. BARRATT said the skilled miner in California was paid \$3 and in Nevada \$3 1/2 per day; but his calculations were based upon an average of \$4 per day. The labourers' work was excellently done by Chinese, who received but a nominal wage.

Mr. FRECHET, in reply to a question, stated that he knew several mines in California, the area of which was not more than 2 or 3 ft. long on the Comstock.

Mr. BATTERS mentioned that above this bed of auriferous rock there was a bed of lignite, or wood-coal, which showed the great age of this extraordinary upheaval.

Mr. COPE said that everyone present had no doubt the fullest confidence in Mr. Batters's opinions and statements, but he should like to ask him whether, after these profits were realised, there was any security that they would be really transmitted to this country?—Mr. BATTERS said that there was really more security for bullion in California than in this country; so much so, indeed, that the authorised carriers of the country insured the safe transit of it for a nominal charge.

Mr. SALMON said that after the full and exhaustive statements of Mr. Batters, he would be unduly occupying the time of the gentlemen present if he attempted to go over the same ground. He would say, however, in reference to the remarks of Mr. Cope on the difficulties of foreign mining generally, they were difficulties he (Mr. Salmon) thoroughly appreciated; but that the immense advantage of mining in the Pacific States of the United States was that none of the difficulties usually met with foreign mining had to be encountered there. In language and general laws we were one with the United States; and the climate of the Pacific coast was such that not a gentleman present but would be benefited by a journey there. There were no alien laws or language to perplex us; no yellow fever or chronic cholera to carry off our agents periodically; or no civil war to break up society every few months. Any of the mines acquired by the Pacific Mining Company could be reached from London in three weeks with greater comfort and less fatigue than any similar journey on the continent of Europe. With regard to title, the occupation or “location” titles of the various

districts were recognised by the United States (to whom all the waste or unoccupied lands of the Union belong), and were as good a title as needs be. As, however, this location title could at any time (where the title is not in dispute) be converted by application to the Land Office into an absolute fee simple in perpetuity by a patent issued from the United States Government, it is well that English companies should have patents for the mining properties acquired by them. A United States patent is an indefeasible Government title. With respect to the properties purchased for the Pacific Mining Company, he could only say that they had been selected after the most careful examination, and after weighing every point connected with them. They were, besides, mines which they were not way interested in purchasing, and the examination of which they approached without any prepossession.

Mr. COPE wished to enquire as to the water rights, which were so important in the case of the Gravel Mines?—Mr. SALMON said there was a gentleman by his side, Mr. Pesshy, who had been largely connected with mining in Nevada, who had, indeed, been an official in the Gravel Mines and Hale and Norcross Mines, in the Comstock ledge—who could properly explain the legal position of the "ditch" property, as it was there called, better than he could.

Mr. GUTTERIEZ wished to know if the purchase-money of the mine included the plant, &c.?—Mr. BATTERS said that everything was included, plant, stock, horses, &c. The entire purchase-money was \$35,000.

Mr. E. COOKE asked if, in the contemplated extension of operations, more machinery would be required?—Capt. BARRATT said that the present operations would be continued, although extended, but no further machinery would be required. At Union Hill the mill was driven by steam, and at Lander Hill there was a steam-engine more than at present required. There was no doubt they would have to put some amalgamation barrels, &c. At Union Hill it was proposed to have a new lift. He believed the water in Union Hill to be a most favourable indication, as being in the granite, it shows the lode to be porous, large, and continuous. The total cost of this new lift, with pumps, would be about \$1000, and would take, probably, about six months to complete. There were enormous quantities of rejected ores in the mine, worth over 30¢ per ton, which, with improved appliances, could be worked at a very good profit.

In answer to an enquiry as to whether a capital of \$15,000 would be sufficient to meet the expenses in connection with the extension of operations, Captain BARRATT replied in the affirmative, for he did not recommend removing the present mill, his idea being to leave that for the best ore, and to put up barrels. The gold mines were about 14 miles from the mill, and the silver mine was about 90 miles from the Union Pacific Railway.

Mr. ENGLISH, who was interested in the Buckeye Mine, stated that although that property had returned dividends of about \$6000 per month, there had been an additional outlay during the last five years of \$800 per month in connection with the driving of the tunnel. He believed the profits would now be doubled or trebled.

After some further discussion, Mr. H. L. PHILLIPS proposed that the united thanks of all present be accorded to Mr. Batters, for the interesting information he had communicated, and also for affording them an opportunity of becoming interested in a mining enterprise yielding interest at the rate of 20 per cent. Few men were to be found who would complete a journey of 15,000 miles in less than three months, and then offer those with whom he was associated the privilege of becoming interested in the result of his labours upon such favourable terms. (Hear, hear.)—Mr. BATTERS seconded the proposition, which was carried unanimously.

Mr. BATTERS having thanked those present for the vote passed, stated that he would not have travelled 15,000 miles, risked his life, and employed his services in this direction for the small sum he would realise, were it not that he would rather receive a small sum with credit than a considerable sum with dishonour and discredit. (Hear, hear.) He had the fullest faith in the company, and believed it would prove handsomely remunerative to all who associated themselves with it. (Hear, hear.) Mr. Phillips had stated that they would receive 10 per cent. upon their capital, but the present rate of profit was 20 per cent., and he should be glad to speculate as to the rate at which the profits could be inexpensively increased. (Hear, hear.) The present results were good enough, but they could most certainly be materially improved. (Hear, hear.)

The proceedings then terminated.

#### IMPERIAL SILVER QUARRIES COMPANY.

An adjourned extraordinary general meeting of shareholders was held at the offices, Palmerston-buildings, on Monday, Lord RANELAGH in the chair.

The notice convening the meeting was read, as were also the minutes of the extraordinary meeting.

The CHAIRMAN regretted the unavoidable absence of Earl Poulett from the chair upon the present occasion, inasmuch as he had advanced considerable sums of money to assist in carrying on the operations at the mine. At the meeting of which the present was the adjournment a committee of shareholders was appointed to discuss the affairs of the company; the meeting took place, and the committee had embodied their views in a report, which he would ask the directors to read.

The report having been read, the result of the conference with the directors, submitted a scheme for the entire reconstruction of the company.

The CHAIRMAN said that legally the business of this meeting was merely to receive this report, and to call the shareholders together again within a prescribed time. As that would be a sheer waste of time, he would suggest that the matter should be now discussed in a fair and liberal spirit.

Mr. A. P. M'KEWAN said he was actuated by one principle—that of supporting any measures which were conducive to the interests of the company. To course he had hitherto taken the best of feelings and of the best spirit—supporting the honourable body of directors, particularly Earl Poulett, to whom they were all personally indebted, and also to the majority of the board, for the handsome manner in which they had conducted the company; but he would ask whether it was not inadvisable at this juncture in the history of the company to adopt the scheme suggested by the committee? He had certainly understood that the question of reconstruction was not to form a portion of the deliberations of the committee. His reason for objecting to the reconstruction was that those who subscribed for a certain number of shares would receive something like 400 per cent. preference over the existing shares. If they were to undertake a reconstruction, let them decide upon a basis which was not likely to raise any question hereafter. He thought it would be much better to modify the scheme now proposed, so as to remove the possibility of any difficulty arising.

The CHAIRMAN said the course proposed by the committee of shareholders and the board of directors was, he believed, the best basis upon which to reconstruct the company. An equitable advantage would be given to those gentlemen who had advanced money, and who really had been working the concern. Therefore the committee and the board considered they were bound in equity to put those gentlemen in the very best position they could in a re-constructed company. Take Earl Poulett, he held a mortgage upon the company's property, but he would not hold any mortgage in the new company. They proposed to give him shares only.

Mr. CHURCH thought Mr. M'Kewan must have overlooked the fact that each of the 2568 shares carried a mortgage, which would be given up in a re-constructed company. Under the present arrangements, the holders of those shares were entitled to receive the whole of their money before the other shareholders received anything; but by the reconstruction scheme that preference would be ignored, the whole of the shares being upon the same footing. The holders of those 2568 shares had subscribed hard cash, by which, with an infinitesimal exception, the mine had been carried on up to the present time. It would be most unfair if in a re-constructed company the holders of these shares were not placed upon what would appear to be an equitable footing.

Mr. SMITH (the company's solicitor), in reply to a question, stated that the company was originally constituted with 50,000 shares, secured by debentures issued as a first charge upon the company. This money was borrowed for the purpose of carrying on the mine, and the principal portion was to be paid before any dividend could be paid upon the share capital. It was afterwards arranged that the vendor should have certain shares and debentures issued to him in lieu of cash payment; and he thought equity would compel the payment of all bonds *pari passu*, inasmuch as they were made the first charge upon the company's lands. The CHAIRMAN said all those difficulties would be wiped out by a reconstruction.

Mr. COMSTOCK said that although he should not vote for a reconstruction at the present time, yet he should have no objection to such propositions as would be maintained by the majority of the shareholders.

Mr. M'KEWAN would take the liberty of asking the Chairman and his colleagues to re-consider the question before the next meeting.

The CHAIRMAN said that he was determined, unless some re-constructive scheme be carried out, to go in for liquidation.

After some further discussion, it was agreed (upon the proposition of Mr. CHURCH, seconded by Mr. W. A. BROWN) that the directors be requested to convene a special meeting for December 6, for the purpose of carrying out the recommendations of the committee.

A vote of thanks was passed to the Chairman, which concluded the proceedings.

#### THE GOLD MINING COMPANY OF YUBA.

The first general meeting of shareholders was held at the offices, 8, Finch-lane, on Thursday.—Mr. H. E. ORMEROD in the chair.

The notice convening the meeting having been read, the report of the directors was submitted, which stated that letters had been received from well-known gentlemen in Idaho, stating that the Minerva lode is now 5 ft. wide, the result of "work done upon it during this spring and summer;" that "the arastra has been at work with first-rate results;"—that "W. Clemens (the company's proposed mining engineer, who is at present working this and other mines) has just finished a splendid run in the Minerva and the Varieties quarries, while Mr. Atkins, of the Atlanta, has been sending down more than \$1000 a week with his 5-stamp mill, and that he has just completed a larger one, which will run all the winter, and he expects thereby to realise at least \$500,000 per annum." The directors' report referred to the importance, in an undertaking like the present, of being connected with men of well-known integrity, and to the confidence and satisfaction they experienced from the fact that the owners of the Minerva Mine occupy a highly respectable position in Idaho, one of them having recently been elected to a post of great importance as Territorial Treasurer. The offer of the mine to the company was limited in the first instance to a certain period, which has expired; but the owners have handsomely consented to extend the time, notwithstanding the increase in size and consequent enhanced value of the lode. The owners of the mine have also not only agreed to be paid entirely in shares (12,000), but are willing that nearly the whole of their scrip should be tied up in this country until after two quarterly dividends had been paid by the company.

The CHAIRMAN explained that this was an extraordinary general meeting under the Companies Act, 1867, which made it necessary to hold a meeting of the shareholders within four months after incorporation. Generally at such an early stage there was little to report, but that the directors were able to congratulate the shareholders on the satisfactory letters that had been received from Idaho, and the information Dr. Bishop was able to give as to the increase in the lode. The board were desirous of submitting to the shareholders full particulars as to the property and the terms for its purchase, with which view he proposed that the draft of the agreement,

which had been sent to the vendors, should be read to the meeting, so that the purchase of the mine and machinery should be the act of the shareholders after full information on every point desired. Calling particular attention to the terms of purchase, with which the vendors of the mine would receive the whole of the purchase money (12000), in shares, of which 10,000 were to be retained in the company's office, or with its brokers, until after the receipt of two dividends, the amount to be paid for the mill and machinery being 2000.—half in cash, and the remainder in shares.

On the motion of the CHAIRMAN, seconded by Mr. QUILTER, it was resolved unanimously,—"That the report of the directors, now read, be received and adopted."

The CHAIRMAN called upon the solicitor to read the draft of the agreement which had been sent to Idaho for the signature of the vendors.

Dr. BISHOP, in reply to questions from shareholders, stated that he had personally examined the mine, and the arastre process after day; that he had broken off stones of ore, taken them to his lodgings and assayed them by a simple mode, and that, making allowances for the ordinary contingencies of all mining operations, he had satisfied himself that all uncertainty was eliminated from the operations of this company, in the success of which he had every confidence. That the machinery could not be got to work until after the breaking up of the winter roads allowed the mill and machinery to be taken to the mines, but that during the winter work could be proceeded with in the mines in readiness for the machinery.

On the motion of Dr. BISHOP, seconded by Mr. FOWLER, it was resolved unanimously,—"That the directors be authorised to purchase, on behalf of the company, a mine called the Minerva Mine, situate at Grouse Creek, in Alturas county, Idaho; and also a certain mill, commonly known as the Victor Mill, situate at Rocky Bar, together with a mill-house, engine, and other machinery appurtenant thereto, for 14,000, payable partly in cash and partly in shares of the company, on the terms and subject to conditions submitted to the meeting."

Shareholders present expressed their satisfaction at the statements of the Chairman and Dr. Bishop, and their intention of increasing their holding in the shares of the company.

A vote of thanks to the Chairman concluded the proceedings.

#### DON PEDRO NORTH DEL REY GOLD MINING COMPANY.

An extraordinary general meeting of shareholders was held at the London Tavern, yesterday.—Mr. HENRY HAYMEN in the chair.

Mr. J. E. DAWSON (managing director) read the notice convening the meeting.

The CHAIRMAN said that upon the present occasion he would have contented himself by simply moving that a dividend be declared at the rate of 100 per cent. per annum, were it not that some misapprehension appeared to exist among the shareholders with reference to Capt. Thomas Treloar's report, in which he used these words:—

"The bottom of the mine is looking well, and the decline in the produce is due to trouble arising from water and inexperience of miners; and seeing this, seeing also that there will be more trouble in driving the adits than expected, and looking at the time that must elapse before the powerful pumping-engine (the CHAIRMAN'S opinion was) unless something new is discovered, will not be itself again for 12 or 15 months to come." Now, as far as he (the Chairman) was able to judge, Captain Treloar referred to the very large returns they had had, and not to the fair and moderate returns made since June, and he based that statement upon the fact that at that time no new lode had been discovered. When that report was sent out to the shareholders, special attention was directed to Mr. Symon's letter, written a few days later than Capt. Treloar's report, in which he announced the important discovery of a new lode. He (the Chairman's) opinion was based upon Capt. Treloar's report, upon Mr. Symon's letter, and also upon the general working of the property, and upon these bases he confidently affirmed that the shareholders might continue to look forward to the realisation of very fair and good returns, and that there was nothing whatever to be anxious about—on the contrary, as far as he was concerned, he had every confidence in the future of the undertaking. (Hear, hear.)

For the first nine months of 1868 the profits amounted to 41,021, but for the corresponding period of the present year the profits were 46,010, being very nearly 2000 additional profit up to the end of September. In 1868 they paid in dividends 31,226, and in 1869 (including that he was now about to propose) they paid 38,922. It was true that in 1868 there was carried forward 11,412, whereas now the balance to be carried forward was 8292. It must be remembered, however, that the difference between that and what had been done in 1869 was largely in favour of the company; and his own impression was that 1869 would be shown by the accounts, when they were made up, to be a very favourable year, and that the operations would be successful. He did not wish to mislead shareholders, but he would maintain his own opinion—that the Don Pedro Mine had not yet attained anything like the success it was likely to realise. They might and would have variations, which were to be expected in mines of all kinds; but in Maquine they had large quantities of gold ready to be worked, and he believed they would continue in a highly satisfactory position. (Hear, hear.)

He then moved "That an interim dividend of 3s. 6d. per share (being at the rate of 100 per cent. per annum) be declared, and be paid on the 1st of December for the quarter ending Sept. 30."—Mr. WILDE seconded the proposition.

Mr. BAILLHAX expressed his surprise that, after such expensive machinery was about to be sent to the mine, Capt. Treloar should give the shareholders an idea that the Don Pedro Mine was to be a failure for the next 12 or 15 months.

The CHAIRMAN: Pardon me, Sir, Capt. Treloar does not say so.

Mr. BAILLHAX would like to know how soon that machinery was likely to be at work, and whether when it was at work it would be likely to realise as good returns as before it was sent out? He was glad to find that another lode had been discovered subsequently to Capt. Treloar's report.

The CHAIRMAN expressed his surprise that any proprietor should have so misread Capt. Treloar's report. It must always be remembered that when a man examined a mine, and found it was not looking so well as upon a former occasion, he would indicate the difference, and it was under these circumstances that Capt. Treloar wrote this report. As to the machinery, the inference was to be formed from Capt. Treloar's report, that it would be required before Don Pedro could realise what it had done—at any rate, that was how he read it. But subsequently this important discovery had been made. He had not the slightest doubt that, irrespective of the new lode, or anything of the kind, they would continue to realise a fair average produce. They could not expect any mine like the Don Pedro always to give 29,000 cwt. per month, for there was sure to be variation. Apart from the new lode, they had the satisfactory feature that while they were taking away stuff which gave a very large amount of profit they had before them the probable fact that the moment this machinery was erected, and these adits were completed, the mine would yield an amount of wealth unprecedented in the history of gold mining. (Hear, hear.) The shareholders should take these facts into consideration. As far as he was concerned, he conscientiously believed that the future results of Don Pedro would be greater than they had ever yet been. (Hear, hear.)

A SHAREHOLDER enquired if the new lode was likely to be affected by water?

The CHAIRMAN said he believed the new lode was above the water level, and was therefore high and dry.

The proposition declaring the dividend was then put, and carried unanimously.

A cordial vote of thanks to the Chairman for the satisfactory explanations he had afforded was passed, when the proceedings terminated.

#### GREAT ROYALTON MINING COMPANY.

A general meeting of shareholders was held at the company's office, Finch-lane, Cornhill, on Saturday.—Mr. JAMES CROFTS in the chair.

Mr. J. H. CROFTS (the secretary) read the notice convening the meeting, and presented the statement of accounts, which showed a credit balance of 401. 5s. 1d. A statement of liabilities and assets was also presented, showing, after charging the October cost, and also the cost of a 26-in. cylinder-engine (3300), a debit balance of 3141. 4s. 11d. The subjoined report was read:

Nov. 19.—The adit is now nearly finished, and the water let down. This is a very good job done, indeed, as it will carry off all surface water, and save pumping it. The men are now engaged in taking out the foundations for engine-house, boiler-house, &c. I shall push this off as fast as possible, so that the engine will be at work as early as possible before winter sets in. On Monday the engineers will send me the plan for the masons, and also state the amount for which he will take the engine down and erect it again. When I receive the estimate I will at once lay it before you. I think you would do well to let it by contract, provided it is done at a fair price, as the engineers would have an interest in their work, and I think it would be done quicker. As regards our prospects, I am of the same opinion as at first. That we have a valuable property is certain, the lodes being large and productive, and they will yield good profits to the shareholders. We have five lodes in the set, and the supply of rich tin stuff would appear to be almost inexhaustible. I shall push on all things as fast as possible, so that we may get in the market with tin the earliest moment.

—THOMAS PARKYN.

The CHAIRMAN, in moving the reception of the reports and accounts, congratulated the shareholders on the splendid prospects of the mine. Since the special meeting of Oct. 31 the committee had completed the purchase of the engine, which had cost 3300; it was in first-rate condition, and would do all the work necessary for them. The erection was being pushed on as rapidly as possible, and he hoped that in February next it would be ready to go to work, together with 36 heads of stamps, which they could keep fully employed. They had immense quantities of rich tin stuff, which the agent stated could be returned at great profits to the shareholders.

The report and accounts were then unanimously adopted.

On the motion of the CHAIRMAN, it was then resolved that a special meeting should be held in December, for the purpose of making a call.

The usual complimentary vote of thanks to the Chairman terminated the proceedings.

#### SOUTH DARREN MINING COMPANY.

The half-yearly general meeting of shareholders was held at the company's offices, Austinfriars, on Thursday,

Mr. SWONNELL in the chair.

The MANAGER read the notice convening the meeting, and the minutes of the preceding one. The accounts for the six months showed a credit balance of 18087. 3s. 4d. The subjoined report was read:—

Nov. 23.—We beg to hand you our report on the working of this mine during the last six months, and we are glad to be able to inform you that notwithstanding the long-continued drought during the summer months, the returns have not been considerably less than those of the previous half-year, while the month's costs have been very much lower. The following operations have been carried on during the six months just completed. A communication between the 60 and the 70, by means of a winze, has been effected, which has created a good ventilation, so that the end can now be pushed on more vigorously than before. The 70 has been extended west about 11 fms.; the lode in the present end is 2½ ft. wide, and is composed of good mineralised kilaas, carbonate of lime, lead and copper ores; its present value is 15¢ per fathom, and it presents indications of improvement. The length of ore ground passed through in this level is about 24 fms., and is worth from 12¢ to 20¢ per fathom. We should here remark that

the ore ground passed through is much longer in this level than it was in the level above (the 60), and this evidently shows that the ore ground lengthens as we descend. From the appearance and character of the lode gone down in the bottom of this level we are of opinion that the 80, when laid open, will be found more productive than this level has been. The productive ore ground in the 60 (worth from 20¢ to 30¢ per fathom) is about 20 fathoms in advance of this end. The lode in the stope over this level is 3 feet wide, and is worth for lead and copper ore 18¢ per fathom. The drawing-shaft has been sunk below the 70 about 6 fathoms: we hope to have it down to the depth required for an 80 fathom level in about two months hence; it would have been down ere this, and the 70 would have been further extended, had it not been for the long drought, which caused all operations in this part of the mine to be suspended. The 60 has been extended west about 18 fms.; the lode has throughout this extent produced lead and copper ore, but not enough to value. From the appearance of the present end, and the character of the lode gone down in the level above (the 60), we are of opinion that this level will improve as we advance. The lode in the stope over this level, east from the winze, is 2 feet wide, and worth for lead and copper ore 10¢ per fathom. The stope west of the winze has been worked up to the 50. The 50 has been extended west about 6 fathoms; the lode in the end being poor, we have suspended the extension of it for the present. The lode in the stope over this level are from 2 to 3 ft. wide, and are worth for lead and copper ore from 10¢ to 14¢ per fathom. The lode in the stope over the 40 is 2 ft. wide, and is worth for lead and copper ore 11¢ per fathom. The shallow level has been extended east about 8 fms. on the course of the lode, which has produced spots of copper, sulphur, &c., but of no value. We recommend the present operations to be continued in this part of the mine, and to carry out the above points will incur a monthly expenditure of about 3400, against which, from present prospects, we calculate on returning about 5000 worth of ore monthly, weather permitting. —JOHN BOUNDY, W. H. BOUNDY.

A SHAREHOLDER presumed that with an increase of labour they would have an increased quantity of ore.—Captain BOUNDY feared that at present there would not be any considerable increase in the get of ore.

Mr. MURCHISON explained that from the balance there must be deducted 3177 for October costs, due in a few days. The 2s. 6d. dividend now declared would leave about 6800. In hand.

A SHAREHOLDER enquired whether it would not be better to pay off Sir Prye Prye's dues?—Mr. MURCHISON said that most of it was for ores for which the money was not yet received. He was paid up to the end of June, and the estimate was for the whole of the year, which was, therefore, scarcely due.

The CHAIRMAN said that the dues which fell to his share was very small. He had merely to move the reception and adoption of the report and accounts.

The resolution was unanimously adopted.

Mr. MURCHISON explained that by the drawing shaft they would greatly facilitate getting the ore to surface. Previously the whole of the ore had to be carried to another shaft, which led to a considerable waste of labour.

The directors and auditor were unanimously re-elected, the auditor to receive the same amount of remuneration.

The CHAIRMAN remarked that the dividend (2s. 6d. per share) would be paid as soon as possible, and the proceedings then terminated, with the usual complimentary votes.

#### PRINCE OF WALES MINING COMPANY.

A quarterly general meeting of shareholders was held at the company's offices, St. Michael's House, yesterday.

Mr. J. Y. WATSON, F.G.S., in the chair.

Mr. JEHU HITCHINS (the secretary) read the notice convening the meeting, the minutes of the previous meeting, and the subjoined report and balance-sheet, showing a credit balance of 20217. 1s. 6d.

Nov. 24.—Since the last general meeting the 77 cross-cut south has been driven 11 fathoms, being now 12½ fathoms from the shaft. About 9½ fathoms from the shaft the lode was intersected, and 3 ft. driven west on its course, where it is 1 foot wide, worth 6¢ per fathom—a promising end. The 77 east has been driven 1 fathom; lode 1½ foot wide, composed of capel, quartz, peach, mundle, and copper ore, yielding 10¢ per fathom, worth 14¢ per fathom. A very kindly lode, and the character of the strata on both sides of it is precisely the same as accompanied the best bunches of ore throughout the mine. The 65 east has been driven 7½ fathoms; the lode in the present end is 1½ foot wide, composed principally of capel and quartz, with a little copper ore intermixed, but not to value. The 65 west has been driven 3 fathoms through a good and profitable piece of ground; the lode in the present end is 3 ft. wide, worth fully 12¢ per fathom. We have two stopes in back of this level, worth on an average 16¢ per fathom each, and one stope in the back of the 65 east worth 14¢ per fathom. The 55 west has been driven 2 fathoms; the lode in the present end is 2½ feet wide, principally capel. The 55 cross-cut north has been driven 3½ fms. The ground is favourable both for driving and the production of copper. Three stopes working in the back of the 55 west are worth on an average 10¢ per fathom each. A stope in the bottom of the 55 east is worth 12¢ per fathom, and one stope in the back of the 55 east is worth 12¢ per fathom. A pitch in the back of the 45 east, by two men, at 10s. tribute, and the men are getting good wages. The new engine-shaft is being cut down and made good 35 fathoms from surface, and a plunger fixed, to be worked with the crusher-wheel, to keep all the tailing water above the 45 east, which is very considerable in wet seasons. We have also fixed a 9-inch plunger in the 65, at the engine-shaft, and done away with two drawing-lifts, which has very much eased our pumping-engine, as also the cost. As the air in the 77 is not sufficiently good to drive both east and west by a full pair of men, we intend to put a rise through from the back of the cross-cut, for the purpose of opening out ground and ventilation, when we shall be in a position to sink the shaft, and drive the 77, both east and west, with full pair of men.

Our copper ore sold on Thursday last weighed as follows:—The parcel computed 50 tons weighed 50 tons 15 cwt.; the parcel computed 42 tons weighed 43 tons 6 cwt. = 94 tons. We expect to sample to-morrow about 90 tons of copper ore of fair quality.—J. GIFFORD, W. GIFFORD.

The CHAIRMAN stated, with reference to the accounts, that the last sale of ore was not brought into the account, nor is the October cost, which was paid out of the balance yesterday.—A SHAREHOLDER enquired the amount of the October cost?—The CHAIRMAN said about 5000.—The SECRETARY explained the several items of the account, upon which

The CHAIRMAN remarked that at the last meeting there was an undivided profit equal to 1s. 6d. per share, although 1s. per share only was declared. This permitted the payment of a 1s. dividend on the present occasion.

The necessary resolution for the declaration of the dividend was then put and unanimously carried.

A SHAREHOLDER enquired why the number of tons of ore sold each month continually decreased?—Mr. JEHU HITCHINS said that the ore required more dressing now than formerly, and, therefore, there might be a slight reduction in the number of tons sold. That said, moreover, had been of a little higher produce.

A SHAREHOLDER said that as Captain Gifford had received instructions from the committee to drive a cross-cut in the 65 fm. level, to test the lode to the south, he thought he was not justified in stopping.—The CHAIRMAN said that the captain had stopped the cross-cut on the supposition that the sink from the 55 would prove it equally well, with less expense. Nothing was met with in the 3 fms. which actually were driven.

Mr. ROSEWARNE thought the cross-cut ought to be driven 6 or 9 feet further. Mr. HITCHINS said there were two sides to the question. If the sink were rich the cross-cut should have been driven, but if poor it might have been advisable to stop it.—Mr. LITTLE said that if the sink showed that the ore was still in front he should not have suspended the cross-cut.

Mr. Jehu Hitchins was requested to write Capt. Gifford, stating that the meeting were of opinion that the cross-cut should be continued, Mr. ROSEWARNE suggesting that he should add a qualification, so as not to compel him to drive on if he could see that it was a useless expenditure.

The proceedings then terminated with the usual complimentary vote of thanks.

#### FOREIGN MINES.

NEVADA FREEHOLD PROPERTIES TRUST.—The following telegram has arrived from Major General Mason, one of the trustees:—"Title perfect; property better than represented. Took possession last Saturday.—Austin, Nevada, U.S.A.—Nov. 23, 1869."

IMPERIAL SILVER QUARRIES.—Extract of a letter from Mr. Lewis Chalmers, dated Nov. 1:—"Eleven feet of tunnel were made last week. The flow of water is increasing, as also the stretch, and the ground is getting very dangerous to work under."

CAPE COPPER.—The directors have despatches, per Saxton, to Oct. 9, in Namagaland. Owing to the absence of the superintendent, who had proceeded to Cape Town on business, and was on his way back to the mines, the regular monthly reports are delayed to next mail. The returns for September are—yield from Ookiep Mine, 525 tons, averaging 32½ per cent.; and from Spectakel, 104 tons, of 39 per cent. Transport to the coast from Ookiep 932 tons, and from Spectakel 168 tons. Lung sickness had broken out amongst the oxen on the Port Nolloth road, one of the carriers having lost five, which had obliged him to stop carrying for awhile to get all his stock inoculated. The construction of tramway had commenced, and on Oct. 4, 1¼ mile was laid. The engineer writes:—"Nothing has yet occurred to induce me to alter my opinion as to laying at from 3 to 4 miles per month, after we pass the first 10 miles, and in January next I hope to be very near the 10th mile. Bill of lading is received for 25 tons per present steamer. The Flower of Moray, with 384 tons of copper ore, has arrived at Swansea; 97 tons of ore and regulus were sold by public ticket on Nov. 16, at an average of 13s. 4½d. per unit."

#### BRITISH MINES.

\*—The following were received too late for insertion in their proper place:—

BRADDA.—R. Barkell, Nov. 24: There is nothing new to report on in the engine-shaft. The Bulwark lode in the 60 is not yet cut through; there is still lead in the lode, but not sufficient to pay for working. The 80 north and east lode is letting out a strong feeder of water; the lode is composed of magars, spar, capel, and a little copper. In the 80 north there is a very strong feeder of mineral water issuing from the east side of the level, and the men are now engaged in driving a short cross-cut, to ascertain if there is any part of the lode standing in this direction; this end is now up to where the lode went off east in the 40, where we had to drive a cross-cut, and the lode we cut was worth 3 tons of lead per fathom; we hope to meet with similar results in the 50. The 40 north is looking well, lode composed of gossan, lead, black and native copper, worth fully 15¢ per fathom; price for driving, 5s. 10s. The two stopes in the roof of the 40 are yielding—the one 1 ton 15 cwt., the other 2 tons of lead per fm. The communication is effected between Spital's shaft and Prior's level, and the men are now engaged in cutting a lodge, after which they will cross-cut the Bulwark, and drive on the east lode, which is worth 2 tons of copper per fathom; this lode, as you are aware, passed through the roof of Prior's level, and will be cut in the cross-cut before cutting the Bulwark lode. The lodes here being embedded in a good channel of ground, the chances in this part of the mine are good.

NEW BRYNPOSTIG.—J. Kitto, Nov. 25: We have a nice kindly lode in the 20, driving east from engine-shaft, and for several days past we have had some nice solid cubes of lead ore in the flooken, or soft part, towards the lying wall, and as we are now nearing the spot where the rich gossan was found near the

surface. I think we may reasonably anticipate a further improvement. The engine will go to work on Saturday next, it would have been working long ere this, but we have not been able to get the castings from the foundry. The pumps, rods, &c., are all fixed in the engine-shaft complete, and the water will be in the early part of next week, when the sinking below the 39 will again be resumed.

**BLYNPOSTIG.**—John Kitto, Nov. 25: The lode in the bottom or 36 fm. level, east of engine-shaft, is still looking well, and the part we are carrying in the forebush, which is from 2½ to 3 ft. wide, is worth about 1 ton of lead ore per fathom. We are not carrying the whole of the lode in the driving, consequently cannot give its full size or value, our object being to push on the end as rapidly as possible, in order to open out ground for stopes; and, besides, we know the best run of ore ground we had in the upper levels is still before us. We have driven this level upwards of 16 fms. through good ore ground, and might have been stopping the roof but for want of ventilation, and, in order to secure this at the earliest moment, we are putting up a rise from the back of the 36, and sinking a pump immediately over it, in the sole of the 24, and have about 3 fathoms further to rise and sink to effect a communication between the two levels; this will take us about a week to accomplish, and as soon as it is completed it will afford ample ventilation, and the ground at each end of the winze will be immediately available for stopes. There is no change to notice in any other part of the mine. We shall sample next week another 20 tons of lead ore.

#### GAIFRON WHEAL VAN MINING COMPANY.

British mining produces an annual revenue exceeding 40,000,000, sterling, and is scarcely second to railways in its total of yield; yet, railways absorb a capital of 500,000,000, and mines scarcely 100,000,000. The best of our railways pay interest not exceeding 5 per cent., and the average is barely 4 per cent., whilst in cases no interest whatever is paid. Many a British mine pays 8 to 10 to 12, and 15 per cent. dividends, and command hundreds of thousands, per cent. premiums on capital subscribed. It is true that there are elements of risks associated with mining pursuits as with railways, joint stock banks, shipping, building, and every other description of enterprise; but the hazard is not devoid of usefulness. The man who cannot brace his nerves with the occasional sight of danger is a mere automaton. To obtain the most of the world's goods is, we take it, the end and aim of all trading commerce and enterprise. Had extreme prudence—absolute certainty of profits—been our rule of action at all times, we should have had no 14,500 miles of railways, no telegraphic communications, no Great Eastern and other levithan ships, no Suez Canal, sanitary improvements, cities and towns lit up with gas, no New River from Plympton to London, or other gigantic works and undertakings that advance civilisation and ameliorate the condition of mankind. So in mining, if, disconnected with speculative risks, we should have no such prizes as the Van, the Minera, the Devon Great Consols, West Chiverton, South Caradon, the Setons, Croftys, Tresavean, Dolcoath, Cook's Kitchen, Botallack, Levant, East Rose, Lisburne, Cwmystwith, and many others; yet mining must have a starting point, and it is not often that the first pioneer meets with success. Such was not the case with Tresavean, Devon Great Consols, Minera, Cwmystwith, and a host of other profitable undertakings; and who shall venture to assert that the "Gaifron Wheal Van" will not equal the "Van" in productiveness? The latter advanced from 50,000, to 450,000, in one year; and from the returns of rich ores from "Gaifron Wheal Van," there is every promise of substantial product and gains, upon a practical development of the various lodes. The works were suspended from exceptional circumstances, and are resumed under the most favourable auspices and promise. The capital is small, yet ample, in the opinion of practical authorities, to mature the works. The Van sells for 475,000, and the Gaifron Wheal Van for 12,500, only. There is an elasticity and vigour about the latter that is most refreshing to the speculative mind, and there is no more risks associated with the adventure than is necessary to stimulate enterprise, and which are the invariable concomitants of active exertion in all branches of commerce and our home industries. The success of "Van" has infused vitality in the district of Llanidloes, and we feel convinced that the date is not remote when we shall have the pleasure and satisfaction to congratulate the shareholders in Gaifron Wheal Van on attaining substantial success.

#### FOREIGN MINING AND METALLURGY.

Still greater activity has prevailed this week in the Belgian coal mining centres. At certain points it is stated that the demand is larger than the extraction; and it appears tolerably certain that the trade has entered upon a period of progress which promises to the coal-workers a season very superior in results to that of last year. The only black point—that is, the only discouraging element—in the state of affairs is the continued difficulty which coal-workers experience in obtaining adequate means of transport on the railway lines. Great efforts are stated to be made, in order to remedy the present unfortunate state of affairs in this regard; but as yet they have been attended with no result. Prices have not varied, notwithstanding the abundance of the demand; but they are maintained with continued firmness. During the last few days a contract has been let for 2273 tons of Vignoles rails. The highest tender was 74. 12s. per ton, and the lowest tender 74. 7s. 7d. per ton; these rates were somewhat lower than the corresponding tenders sent in January. A contract for a small lot of cramps was let to M. de Dorlodot. M. de Dorlodot have just established a complete set of bolt-making machinery, which was supplied to them by M. Gobert, jun.

The Prussian metallurgical market has not changed its appearance; prices have maintained their firmness, and the demand continues to display animation. Contracts for rails and other materials have recently been let. Thus the Nassau and Wiesbaden Railway Company has given out orders for 778 tons of iron sleepers and 508 tons of cast-steel rails, besides 29 tons of fish-plates. The administration of the Hanoverian Railway Company has let contracts for 6854 tons of ordinary rails, 1148 tons of cast-steel or Bessemer rails, 50,000 cast-steel fish-plates, &c. The Niederschlesische and Markische Railway Company has let a contract for 20 tons of fish-plates, 7 tons of bolts, &c. The past year 1868-9 has yielded good profits to industrial companies; at the same time their dividends have not, perhaps, been scarcely so high as had been anticipated. The Phoenix Mines, Blast-Furnaces, and Iron Works Company, at Laar, has paid 17 per cent. on its A shares, and a trifle over 30 per cent. on its B shares. The Hoerde Metallurgical, &c., Company has paid 7½ per cent. for the year. A similar dividend has been declared by the Bochum Cast-Steel Manufacturing Company. The dividend of the New Scotland Mines, Blast-Furnaces, and Iron Works Company is at the rate of 6 per cent. per annum. The Hochdahl Blast-Furnaces Company has paid 6 per cent. for the year. The Doehlen Cast-Steel Company has paid 15 per cent. for the year. We may, perhaps, advantageously append a few further details from the report of the Hoerde Company. The company's first blast-furnace was brought into operation Oct. 10, 1868, and the second Jan. 9, 1869. The total production of iron for the year amounted to 55,009 tons, which may be divided as follows:—Ordinary iron for puddling purposes, 17,992 tons; pig, 145 tons; Bessemer iron, 8630 tons; iron for steel, 26,594 tons; foundries, 198 tons; and miscellaneous, 1450 tons; total, 55,009 tons. To produce this iron the company used 114,769 tons of minerals, 49,662 tons of lime, and 63,140 tons of coke. The cost price of the rough iron produced by the company presented a decline of nearly 1s. 3d. per ton, as compared with 1867-8. The amount of the share capital of the company is 475,350, and the dividend paid on this sum for 1868-9 was about 7½ per cent. It appears that in the first half of this year the Zollverein imported 74,421 tons of rough iron, or 22,084 tons, or 42 per cent., more than in the corresponding period of 1868. The imports of iron in bars amounted to 2364 tons, or 81 tons, or 3½ per cent., more than in 1868. The imports of steel amounted to 1445 tons, or 215 tons, or 18 per cent., more than in 1868. The imports of iron minerals amounted to 111,893 tons, or 37,728 tons, or 43 per cent., more than in 1868 (the expression "1868" implies, of course, the corresponding period of that year). The imports of rails amounted to 1731 tons, or 903 tons less than in the corresponding period of 1868.

The greatest activity continues to prevail in the works of the Haute-Marne. The water supply has been completely re-established, and rolling-mills, forges, wire-works, &c., are exerting all their means of production. Iron remains generally firm, and it is the same with accessory articles. Charcoal-made pig for refining is quoted at 47. 8s. to 47. 9s. 8d. per ton; mixed ditto (half coke), 34. 10s. 5d. per ton; local coke-made pig, 34. 10s. 5d. per ton; ditto, from the Meurthe and the Moselle, 24. 17s. 6d. to 24. 19s. 2d. per ton. Merchants' iron, from

charcoal-made pig (first-class in warehouse at the works), 92. to 94. 4s. per ton; mixed ditto, 87. 12s.; coke-made ditto, 84. to 87. 4s. per ton; refined charcoal-made and rolled iron, 124. 16s. to 137. 4s. per ton; ordinary grained iron, 114. 12s. to 124. per ton; ditto fine-grained iron, 134. 4s. to 137. 8s. per ton (with a scale of 8s. per ton per class); coke-made sheets, first-class, have made 97. 8s. to 97. 12s. per ton; puddled charcoal-made ditto, first category, 107. to 107. 4s. per ton, with a scale of 12s. to 16s. per ton between the classes. No. 21 coke-made machine iron has brought 87. 8s. per ton and upwards; charcoal-made ditto, 97. 12s. to 97. 16s. per ton; ditto, No. 20, charcoal-made, 107. to 107. 8s. per ton; mixed, No. 20, 97. 4s. to 97. 12s. per ton; coke-made ditto, 87. 12s. to 87. 16s. per ton, &c. There is little or no change to report with regard to the groups of the East, the North, and the Ardennes; everywhere work is abundant, and prices are well sustained. The Société des Forges et Chantiers de la Méditerranée has received from the Viceroy of Egypt an order for a large floating iron dock. The total length of the dock will be 470 ft. 10 in., and its internal breadth will be 80 ft. The breadth of the sides will be 10 ft., so that the total external width of the dock will be 100 ft. The total height will be 36 ft. 8 in., and the total weight will be 4600 tons. According to a report presented by the Prefect of the Vosges to the Council-General of that department, metallurgical industry has sensibly declined in importance of late in that part of France. First fusion pig is stated to be no longer made in the department, and the second fusion foundries have not increased in power or resources. Only 23 forges are in activity, and the sale of products was still more difficult in 1868 than in 1867. Three concessions of iron minerals—those of Rothau, Framont, and the Evêche—appear to be definitively abandoned; they comprise important bearings of iron pyrites, which can be worked eventually when the establishment of economic means of communication renders the question of transport a matter of less difficulty. The Paris iron market, although quiet, has maintained a good tone.

The French copper market has maintained a good tone. At Havre Chilean bars have made 69½. 8s. per ton, Paris conditions. Upon the German markets copper has excited more attention than hitherto, without the upward tendency in prices being very decided, or without any extraordinary animation in transactions. At Rotterdam, Russian has made 51 fls., and Dronheim 50 fls. to 52 fls. The French tin markets have been dull. The Rotterdam tin market has been rather unsteady; 30,000 ingots of Banca, thrown upon the market by the discomfiture of an Amsterdam house, have been taken—half by a Rotterdam firm, and the balance by two Amsterdam houses. The news of this purchase has had a good effect, and prices have risen from 65 fls. to 68 fls. There has been no great variation in lead at Havre, Paris, or Marseilles. Upon the German markets lead has been in tolerably regular demand, and prices have preserved their firmness. At Marseilles rolled zinc has made 26½. per ton; Silesian zinc has realised 20½. 16s. to 21½. 12s. per ton. Upon the German markets zinc has exhibited little animation.

**THE SLATE TRADE IN AMERICA.**—The slate trade appears to be gradually extending itself in America, and although the mania for slate quarrying has subsided there are still an abundance of capitalists to be found who are ready to embark in any really promising slate enterprise. It is interesting to learn that the Americans are at present taking such an interest in the subject that accounts of the history of slate and slate quarrying are read with avidity. In one of these accounts a list of enquiries to be made in order to determine the value of a property for slate quarrying enterprise is given, which appear to be equally applicable to all slate districts. What other quarries near and on same vein? Is the adjacent formation bastard slate? If not, what is it? Is there any stream near likely to inundate it? Any abandoned quarries near? Is there frost enough in winter to affect the slate seriously? What is the pitch of plane of cleavage? Has it cyphering or mantle beds? If so, how deep? If it has cyphering how deep are the cyphers? If so, what pitch do they pay? Is the slate straight? Are the slates split from the end or side of the block, or both? How thick a space lies between the "water splits" at various depths? Is there abundant dumping ground? Are the colours likely to fade? Are there any veins of quartz in or near the place? Has it been worked in winter? Are there any unfaded slates on the ground that have been out over a year? How many blocks (two slaters working together are called "a block") were ever worked at once? How many squares (100 square feet) do they average to a block? What price does roofing slate bring there? What is the freight? What money has been made there? What force could be used next year? What has been the principal market? Have slaters been easily obtained, and at what rate? At what price would they contract? What is the price of labour? To these queries injunctions were added to examine the rubbish heap, to see whether the slate rubbish keeps its colour. Examine the slate by fusion to detect sulphur, and by sinking in water to test imperviousness. Trust only specimens as you see dry and split. Look out for veins the further development of which necessitates tunnelling. It is remarked, in conclusion, that people have only half learned to distinguish between substantial roofing slate and that which easily rots. When they understand this, slate quarrying will occupy a prominent industrial position.

#### MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

**WEST MARIA AND FORTESCUE.**—The rich ore-bearing part of the lode is not being carried at the shaft, but is standing to the north of it, as it did between the 30 and 60 fm. levels. Before Christmas the shaft will be deep enough for a 70 fm. level, and the shareholders will then find that the workings will leave a good profit. Besides which there is the cutting of the Devon Great Consols lode (which has never yet been seen below the 30 in this set), 14 fms. west of the 60 west. This lode, not 200 fms. off in the Devon Consols, gave in one year (1846) 72,000,000.

**AT OLD WHEAL BETSY (Lead)** active preparations are being made in putting up stamps. It is intended to stamp and dress the old burrows—the accumulation of half a century, which it appears, from various assays taken, will pay well.—OLD TRUSTEES.

**NANGILES.**—The prospect here has considerably improved. They sold over 550,000 worth of tin for the quarter. These sales will increase, excluding good copper sales to come.

**GREAT CARADON.**—In the 70 fm. level the lodes are still improving, being 4 ft. wide, and rich for copper, lead, and blende.

**VIRTUOUS LADY.**—They have purchased a powerful crusher, which is to be at once erected for crushing the ore raised.

**CWM DWYFOR (Copper and Silver-lead).**—The district in which these mines are situated is likely, it appears, to become one of the most celebrated in North Wales. The discovery of a rich silver-lead lode in proximity to the copper lodes in these mines was a complete surprise upon the mining world, as the country was so little known as favourable for lead, although one of the most prolific districts for copper in the United Kingdom, and copper also of the highest quality. It now appears that within the limits of the Drws-y-Coed Mine a rich silver-lead lode has also been discovered, which is being worked with great vigour. These lodes are adjoining and parallel with the Cwm Dwyfor lodes. The inference is obvious that we are on the eve of developing a new and rich mineral tract of ground long known to be rich in copper, but in which hitherto these rich silver-lead deposits have remained unwrought. The Cwm Dwyfor level is now within 6 or 7 yards of the great copper lode which, when out, will probably enhance the value of this property four or five fold.

**GWERN-EVA (Llantrissant).**—The secretaryship of this lead mine has been removed from Liverpool to the offices of Mr. William Ward, of Crosby House, Bishopgate. A call of 8s. per share has been made to pay off the liabilities, and funds provided for sinking the shaft 20 fms. under the fine course of ore going down in the bottom of the old workings. The lode in the main shaft was last reported worth 45 cwt. of lead per fathom; it is composed of carbonate of lime, lead, and blende.

**POLBRENN.**—The accounts from this mine continue of a very satisfactory character. Capt. J. Nancarrow, the manager, reports that he shall be raising tin in a few days, and that it will be of very excellent quality.

**GUNNLSLAKE (Clitters).**—This mine is looking exceedingly well. The last sale, of 100 tons, realised 71. per ton. They intend being in the market shortly with a good parcel of tin. Capt. T. Trevelion has thoroughly inspected the mine, and as many of the shareholders are at a distance, I think it highly desirable that his report should be published in the Mining Journal, that his co-adventurers may learn the position and prospects of the mine more fully.

**WEST MARIA AND FORTESCUE.**—The copper ore sale gives a return of about 1000, to which must be added some 600, more for carriage. Besides this, they have a large quantity of muddle not sold. Although shares are quoted at a very low figure, in consequence of being knocked down by the "bears," who find shares scarce, the mine will soon tell its own tale by the sales of ore.

**NANTEOS CONSOLS.**—Many are the conflicting statements relative to this run of mines. I have known the property for near 30 years; first under the management of the Messrs. Taylor, then under Mr. T. P. Thomas, of London, and subsequent parties, all of whom returned large quantities of ore, yet got tired before a fortune could be realised. But strange after the lapse of many years that Mr. T. P. Thomas should again return, and almost by personal exertion recommence these same mines, and not without the sneer and ill-will of many; but if a practical man's opinion (and one who holds the management of a paying mine in the locality) can be of any service to the community, or to Mr. Thomas's would-be supporters, I beg to say, without fear of contradiction, that the appearances of the ore floors, &c., fine specimens of lead ore, and in no small quantities, are really cheering and surprising at so recent a period of re-working. I firmly believe it a first-class property; and so, too, will be found the Eystumtean an adjoining mine, the property of our respected neighbour, Mr. Theodore Paul, whose success in mining would be pleasing intelligence to the whole county. The Eystumtean Mine has been held in high repute by the most experienced mining agents of this district for several years past, and it is firmly believed that a fair legitimate outlay would ensure success to the capitalist. I have no hesitation in stating that there has been as much lead ore sold from these run

mines enumerated at their depth as from any other in the Aberystwith mining district; they are comparatively shallow, their 26 fm. level at Nanteos Consols yielding (by their agent's report) 2 tons to the fathom. I believe this report to be true, having seen at the surface the lode-stuff broken from it. I may further add that from its character, and other cheering appearances, I have become a purchaser of shares for no other reason than as a permanent holder, especially while affairs seem to be growing to so successful an issue.

**WEST MARIA AND FORTESCUE.**—This mine is opening out extremely well; and from last week's Journal it will be seen the ore sold is richer than that obtained from its next neighbour, Devon Great Consols. The fact that as the quantity of mineral raised in West Maria increases so does the quantity of mineral raised in its next neighbour, the Devon Great Consols, in a manner in which the mine has been laid out, and the two or three important points likely to be proved in a few weeks, make it one of the most desirable speculations in the West of England.

**THE CORNISH MINE SHARE MARKET.**—The official notification of the reduction in the tin standard on Monday last, from its being previously anticipated and prepared for, has exercised scarcely any influence either on the amount of business or the quotations of the Cornish Mine Share Market. Transactions have been effected throughout the week on a moderate scale in a good many mines, and on the whole, the few alterations which have occurred in the rates have mostly tended to support the opinion we expressed in our last report, that a more settled and more favourable state of the tin market may be reasonably looked forward to more long.

A correspondent writes:—I have an idea that the Banca sale, as now held, is a complete bugbear in the tin market. I most heartily wish there was an end to it. Why not sell Banca tin as it arrives as well as Straits tin? Why not sell all tin as brought into the market, as copper, lead, spelter, or any other metal is sold? I know no reason. If you know of one I shall be glad to be enlightened on the subject, for we have scarcely got over the fear of one sale, before we are pointed to another cloud charged with tin instead of water, arising in the eastern horizon, which is sure to deluge the county when its fearful contents are poured out upon us. Forty times at least have we been threatened in my day, but still we live; and I think we should live equally well, if not better, if the contents of the Banca cloud were poured regularly on us.

The affairs of Pendarves United are still, as can well be imagined, discussed with much freedom. From the best information we can glean they ought to reduce their returns of tin to 18 or 20 tons per month. With good management they might then pay their working cost.

Helston is one of the most important tin mining centres of Cornwall. Much of this is due to the practical knowledge and business energy of Mr. Henry Rogers, the present mayor of that borough, who is a pursuer of a number of these mines, including Tremorris, Tremereheer, Trumpet Consols, East Trumpet, and East Wheal Lovell. They are named in now making profit at the rate of 20,000, a year, and dividends of 8½ have been declared per share (3½ p. paid). At the last meeting of this mine Mr. Rogers received a handsome testimonial. Other mines in the locality are New Trevenen, New Wheal Lovell, East New Lovell, and the noted Great Wheal Vor, which last year stood next to Dolcoath for productiveness. Mining is, of course, a great stay to the immediate neighbourhood of Helston; at Trumpet Consols alone the labour cost is \$500, a month.

Prosper United Mines have only a few men at work just now, a large number having been discharged at the end of last week. We hear the whole of the materials are to be sold.

**A NEW MAN-ENGINE.**—At the Providence Tin Mines, near St. Ives, on Wednesday last, a work which has been contemplated for some years, and which has been two years in hand, was inaugurated—a man-engine, to assist the 200 underground tollers for 140 fathoms of their ascent and descent, was used for the first time by visitors, agents, and miners, and answered admirably. —West Briton.

**TREATING ORES TO OBTAIN COPPER, &c.**—Mr. WM. WRIGHT, of Mostyn, copper smelter, has specified an invention, which has for its object improvements in treating ores to obtain copper and other metals therefrom. For this purpose he takes any suitable ore, such as the refuse of burnt copper pyrites, and after reducing it to powder roasts or calcines it till all the sulphides of the metals are decomposed. It is then placed in a tank fitted with suitable false bottoms, and add weak muriatic acid and water, pumping it through until nearly all the copper is rendered soluble, then washed with water till all the soluble copper is washed out. The lead and silver remain behind in the ore in the form of chlorides, which are readily dissolved by brine, and are then washed out, and afterwards precipitated with sulphide of sodium, or by any other well-known means, so that not only can the copper contained in the ore be obtained, but also the silver and lead, if any.

**OBTAINING MALLEABLE IRON OR STEEL FROM CAST-IRON.**—The invention of Mr. J. B. SPENCE, of Manchester, relates to that method of obtaining malleable iron or steel from cast-iron which is now known as the Heaton process, or to other processes in which nitrate of soda, or other similar chemical salts, are used for oxidising substances combined with the iron, and consists in a method of using the said salt, whereby its decomposition is to a certain extent retarded. For this purpose he brings the nitrate of soda, or other salt, into a more or less solid body before the melted iron is allowed access to it. This solidification may be effected by pressure, by rolling, or by other means. The process of solidification may be effected in the chamber which is used for receiving the converted iron, or in separate moulds, and Mr. Spence proposes to bind the edges of the consolidated cake of the salt to prevent its rising, or the passage of the metal beneath it by bevelled edges, projections, or other such means. In order when desired to weaken the power of the chemical agents he adds thereto any suitable diluents.

**SAFETY EXPLOSIVE COMPOUND.**—Mr. PERCY A. BLAKE, of Aberdeen Park, Highbury, has patented an explosive compound, the constituents of which are simply sulphur and chlorate of potash, in the proportions of about one of sulphur to two of chlorate of potash. These substances can be kept separately in a dry powdered state, and mixed by sifting when required. This mixture has been known for years to detonate when struck with a hammer, but was useless as an explosive agent, because it merely burnt slowly when fired by the ordinary fuses. The invention, therefore, consists in rendering this compound practically to explode by the use of a peculiar kind of detonating tube or percussion cap, which renders it exceedingly serviceable for torpedoes, blasting, shells, blowing down palisades, and other similar appliances. The detonating tube to be employed is made of metal about an inch in length, and about 7-32 of an inch in diameter, the bore being about 2-32, but the inventor does not confine himself exactly to these dimensions, as a larger or smaller tube can be used for the purpose. First is introduced into it some of the compound, and well pressed down; next some fulminating mercury, and then a small quantity of detonating silver, and the rest of the tube may be filled up with meal powder. The end of the tube which is filled with the compound is to be placed in contact with the compound contained in the vessel to be fired, and the other end may be fired by any kind of ignition apparatus.

**TREATING IRON ORES.**—The invention of Mr. H. AITKEN, of Falkirk, consists in cooking or carbonising in contradistinction to roasting or calcining the iron ores or ironstones in the open air on a platform or bed of clay, brick, stone, iron, or other material, which may be situated horizontally or at angle to that position (an angle of about 1 in 15 is preferred); or in place of using a platform, the iron ores or ironstones may be placed in an arched casing on the top of a blast-furnace, and when coked or carbonised dropped into the furnace, or they may be treated in an open tower or kiln.

**FURNACES.**—The invention of Mr. S. OAKMAN, of Boston, U.S.A., consists in combining with a smelting or other furnace a vacuum chamber, in which the exhaust is produced by mechanical means, the chamber being connected to the furnace by suitable flues, so that a proper draft may be maintained. This vacuum chamber has inlets over the ports of the furnace, so that the flame and heated products of combustion coming from the ports may be drawn into the vacuum chamber, and thus away from the workman.

**GENERATING STEAM.**—The invention of Mr. W. R. LAKE, of Chancery-lane, relates to a furnace which may be used in a steam generator, or for many other analogous purposes, and it consists in placing within the fire-box of such furnace a chamber opening above the grate-bars through which the coal is fed, which coal, before falling upon the grate-bars, is exposed to the action of the heat evolved within the fire-box while retained in the chamber, above which may be utilised either by bringing them down in a pipe or pipes, and discharging them below the incandescent coals through which they will pass, or they may be conducted away in pipes to be utilised in another place.

**UTILISING WASTE HEAT.**—Mr. E. CROWE, of Middlesbrough-on-Tees, employs a boiler of two horizontal tubes arranged one over the other, and connected by a number of upright tubes arranged at short distances apart along the horizontal tubes. The water line of the boiler is at the diameter of the upper tube or tubes, and the boiler below this line is enclosed in a chamber of brickwork, into which at one end the products from the furnace enter, and which at the other end is connected with the chimney, so that the chamber is, in fact, the flue of the furnace. The sides of the chamber at the level of the vertical tubes are corrugated so as alternately to approach and recede from the vertical tubes, so that the draught is caused to pass in an undulating direction. This causes it to impinge more effectually on the vertical pipes, and at the same time sufficient space is obtained for a man to pass through the chamber to clean it from time to time.—Mechanics' Magazine.

**THE NEW VADE MECUM** (invented and manufactured by Charles H. Vincent, optician, of 23, Windsor-street, Liverpool) consists of a telescope well adapted for tourists, &c., to which is added an excellent microscope of great power and first-class definition, quite equal to others sold at ten times the price. Wonderful as it may seem, the price of this ingenious combination is only 3s. 6d., and Mr. Vincent sends it (carriage free) anywhere, with printed directions, upon receipt of Post Office order, or stamps, to the amount of 3s. 10d.

**ANOTHER CURE OF DISEASE OF THE LUNGS OF 10 YEARS' STANDING** by Dr. LOGGON'S PULMONIC WAFERS.—From Mr. D. Verrent, Coast Guard, Morston, Devon, I have a child who has been affected in the lungs (for 10 years), and they are the only thing that have done him any good. I have tried all other means in vain.—They give instant relief to asthma, consumption, coughs, colds, and all disorders of the breath and lungs, and have a pleasant taste. Price 1s. 1½d. per box. Sold by all Medicine Vendors.

**HOLLOWAY'S OINTMENT AND PILLS.**—Judicious management, at trying seasons, is often a life's value; though it is impossible in this climate of changing temperature, rain, and fog to prevent ill health all together, yet its severity may be much mitigated, and its frequency may be incredibly diminished, by the early adoption of remedial measures. When hoarseness, cough, tight breathing, oppression or weight at the breast, and the attending slight fever, indicate irritation of the throat and chest, Holloway's ointment should be rubbed upon the skin covering these parts without delay, and his pills should be taken in appropriate doses to promote its curative action, and to re-establish respiratory and circulatory harmony. No catarrhs or sore throats can resist these remedies.

CAPITAL £30,000 IN 30,000 SHARES OF £1 EACH.

**ROYAL POLYTECHNIC INSTITUTION.**—This deservedly popular place of amusement and instruction has just been enriched by Prof. Pepper's untiring efforts to make it more interesting and enhance its attractions—resulting in an entirely new and marvellous and thrilling success in the production of not only one "Pepper's Ghost," but several duplicates emanating from one, and mysteriously returning to their shadowy homes. These duplicate spirits are exceedingly fine in execution, but the most attractive are the floating figures which gracefully move round their original. On Saturday last, when we witnessed a first representation, a gigantic skeleton was produced, dancing a "perfect cure" with its head in its bony hands, instead of the forelimbs. The skeleton, however, which has since been involved most of the time in the "labour," this skeleton was unique, its outlines being exceedingly well defined, and its evolutions perfect, but its fitness as an object of amusement was not approved of by that portion of the crowded audience which was not prepared to appreciate the merely scientific merits of its production. The theme for the introduction of the ghost illusions, with the many floating spirits and spectres, is founded on the old stirring romance, "The Mysteries of Udolpho," by Mrs. Radcliffe. Some of the scenic effects are excellent, and will be more so when some of the painted figures are introduced, which, we think, they shall be. On the whole, the talented figure painter and his coadjutor, Mr. Pichler, deserve great credit for the fine illustrations they have thus promised to the many other popular exhibitions and performances which, no doubt, will attract large numbers of visitors to the Polytechnic during the approaching festive days.

men are also employed in re-opening the 146 to the north of the north shaft, which is full of sand and clay; there is a large stream of water coming from this level, which finds its way through the swallows to the deep level for a distance of 800 yards from where it leaves the Pantyffrith vein. The drawing and dressing are going on regularly.

DOLWEN.—D. Evans, Nov. 25: We are still in the north lode, without any sign of the north wall: the end, however, is letting out more water, and the

Our new 60 hp. engine-house, our new water pump, is complete for making the engine, and the whim-house in course of building we calculate will be complete in about four weeks from this time, when we shall fix the whim engine as soon as

possible. We have a quantity of surface work now in hand, and the season of the year is somewhat against us, but we hope to get through the greater part of it by the end of the year.

**GWYDYR PARK.**—W. Smyth, Nov. 23: The ground in the Gwyn Liffon deep adit is without change since last report, the lode shows strong spots of lead ore. In the Vuchelas deep adit the ground is a little more favourable for driving.

**HARWOOD.**—W. Vipond, Nov. 19: After driving from 2 to 3 fathoms of cross-cut we have found the limestone in the position desired. The men are now making the ground good, laying down turn-rail, &c., and they will begin to drive next week to cut the Trough veins. I have let an ore bargain at Scar Head, at 7. 10s. per ton, up to May next.

**HINGTON DOWN CONSOLS.**—J. Richards, Nov. 24: In the 14th west the lode is 6 ft. wide, composed of muddle, capel, quartz, and ore, worth fully 20s. per fathom; the water still flows freely from the drive, which is a most encouraging indication, and must eventually lead to a good course of ore. In the 10th west the lode is 13 ft. wide, and contains 1½ ton of ore, or 6s. per fathom. In the 11th west the drive is still between two parts of the lode, and pretty good progress is being made; the water here is highly charged with copper, and indicates ore not far ahead. In the winze sinking below the 100 wds., which is now down 10 ft., the lode is worth for length carried (9 ft.) quite 30s. per fathom, with every probability of a continuance. In the rise in the back of the 100 west progress is slow, owing to the hardness of the ground. In the deep adit level south the ground is moderately favourable.

**LISBURN CONSOLS.**—J. Paul, Nov. 22: During the last month the Hendrefelin adit has been extended 6 ft. only; at this point the lode is all the width of the end (5 feet), containing spar, carbonate of lime, impregnated with lead and copper ores. At present we have four men driving this end, at 9s. 10s. per fathom. The adit level on the Glogflog has been driven east of cross-cut 1 ft. 1 in. During the past month, in a lode full 6 ft. wide; in this drive we have met with some very nice spots of lead ore: the same remark may be applied to the end west of cross-course, which is now 2 fms. west of cross-cut, 1 ft. of which has been driven during the past month—set to four men to drive west, at 6s. 10s. per fm. We are glad to hear of the purchase of a portable steam-engine, and hope it will soon arrive, when it shall be put as soon as possible on the boundary shaft in order to pump and draw from both shafts, but as there are 153 fms. between the boundary and Francis' shafts, would it not be better to sink the shaft which is about midway between the two, which is now sunk 5 fms. in a good ore lode? If this latter shaft was sunk the same depth as the boundary we could have a communication much quicker than with Francis' shaft, and this is an object of consideration at this point, as we fear we shall not be able to effect a communication 153 fms. without ventilation, or at any rate without great difficulty. And in addition to the above, by sinking an intermediate shaft, we shall have much sooner lay open and be able to take away the ore ground. Taking all things into consideration we think the latter more advisable. There are a few places on the road to the mine that will have to be repaired a little before we can bring the engine from the station. This we put the men to do on Saturday last, so that there may be as little delay as possible when the engine comes. We have pumps on the mine that will do for a short time before others can be got.

**LIVWERNOG.**—I. Jenkins, Nov. 25: The 62, both east and west, is yielding fully the value in lead ore as last reported—quite 2 tons and 1½ ton per fm. respectively. We are somewhat hindered below, owing to the necessity of occasionally stopping the pumping wheel, to enable the masons to work dry, and secure a good foundation for the 16-horse power engine, supplied by Messrs. Barrows and Stewart. This engine is now in place, and the erections to cover the same, and for an additional crushing mill, will hereafter proceed without intermission. The winze sinking below the 40 fathom level is still looking well. We sold 20 tons of lead ore yesterday, to Messrs. Sims, Williams, Neville, and Co., at 12s. 4d. per ton.

**LIVWYN TRIFY.**—M. Barbary, November 25: The lode in the 50, east of the eastern shaft, on south lode, I consider has rather improved since last reported on, being now fully 5 ft. wide, and letting out a considerable stream of water; it is chiefly composed of friable quartz, spotted with lead, blende, and copper ores. The portion of the lode we are now sinking on (4 feet wide) in the winze below the 16 is also a little improved, being a good mixture of lead ore, yielding about 1½ ton per fathom.

**MARK VALLEY.**—J. Van Truscott, Nov. 23: In driving the cross-cut south at the 136, the ground is a little improved. The 124 east will yield 1 ton per fathom. The 124 west will yield 2 tons per fathom. The 112 east will yield 1½ ton per fathom. In the 100 west the lode is poor. The 70 west is poor. The 60 east is worth 3 tons per fathom. The 50 west is worth 2 tons per fathom. The 40 east is worth 3 tons per fathom. The 20 west is worth 1 ton per fathom. The 20 east is worth 3 tons per fathom. No alteration in the ground at Francis' shaft.

**MIDWALLS.**—John H. Nov. 24: During the last few days the lode in the deep adit level has very considerably improved, and is now 7 ft. wide, containing saving work for lead and blende; in fact, the whole of the stuff for the hanging-wall: the prospects in this level are far more encouraging than they have been for the last 40 fathoms driven, and I think we may now safely come to the conclusion that we have, at last, reached the run of ore ground discovered on the top of the hill, and if so, we have at least 50 fathoms of high ground above this level, which the lode will be productive throughout, and can be worked to great advantage. We have cut the cross-course in the 12, west of engine-shaft, referred to in my last general report, and as soon as we get through the same, and are again in settled ground, I expect to enter upon the run of ore ground we drove through in the adit level, at which level it was upwards of 20 fathoms in length, and worth 1 ton of ore to the fathom. This will, no doubt, improve in depth, and in the 24 we may calculate upon having a long run of profitable ore ground. In the 12 west we have crossed the lode above, but have not yet got to the lode in the 12, which is mixed with blende and spots of lead throughout, but so far not in paying quantities. As soon as we get the lying side, and ascertain its full width, we shall push the end westward, in order to get under the bunches of ore discovered in the 12. In the 24, east of engine-shaft, we have been driving through a series of cross-courses for the last 7 or 8 fathoms, consequently the lode has been in a confused state, but in the present end it is getting much more settled, and is about 2 ft. wide, of a most promising character for lead, and is in the mine, and from its appearance we expect it will improve daily. The prospects of the mine altogether are much more encouraging than they have been for the last 12 months, and my decided opinion is we are on the eve of realising a success we have hitherto anticipated.

**MINERAL UNION.**—W. T. Harris, Nov. 25: Low's Shaft: The cross-cut at the 60 yard level south yields tons of lead, and the ground is very promising for an improvement. Brabner's Shaft: The lode in the winze in the back of the 80 yard level is 2½ ft. wide, and is yielding 1½ tons per fathom. The pitch in the back of this level north is 15 wds. lead per fathom. Boundary Shaft: The lode in the 40 yard level north is 15 wds. lead per fathom. The pitch in the back of the 60 yard level south is 10 wds. lead per fathom. Fluorine Shaft: The lode in the 50 yard level south is 10 wds. lead per fathom. The lode in this level north is 5 wds. lead per fathom.

**MINERAL BOTTOM.**—R. Nancarrow, R. R. Nancarrow, Nov. 25: In the 23 fm. level, south of the new shaft, the lode is large, and producing good stones of lead. In the winze sinking below this level, the lode is 3 ft. wide, producing good lead work, and promising for improvement. The lode in the 23 fm. level end, north of the shaft, is large and well defined, composed of quartz, flookan, and muddle. We are pushing on the new dressing-floors, and have commenced dressing a splendid pile of work.

**NANTOES CONSOLS.**—Wm. Barbary, Nov. 25: The crusher was started on Tuesday last, and works well, doing good duty, with a little delay. The second crusher has arrived at the mine, and will be erected at Bwlch Gwyn. The lode in the 26 fathom level, west of the Thomas' shaft, is producing 1½ ton of lead ore per fathom. The lode in the winze sinking below the 16 fm. level about 15 fms., west of the 26 fm. level end, is producing 2 tons of lead per fathom. The slope No. 1 in the back of the 16 fm. level yields 2 tons per fathom. Slope No. 2 in ditto, 2 tons per fathom. Slope No. 3 in ditto, 3½ ton per fm. Bwlch Gwyn: Barbary's lode in the shallow adit, driving east of old men's shaft, on a portion of the lode 4 ft. wide, is of very favourable character, composed of a fine gonian, mixed with lead and blende, of the former about 60 per cent.

**NEW CROW HILL.**—A. Kent, T. Trelease, Nov. 23: At the engine-shaft our progress has been impeded a little in the last week by a breakage in our sweep rod at the engine wheel, but it is again working, and the men making fair progress in sinking Wheel Louisa. At the 75 we are making fair progress, extending the level eastward, but there is no change in the lode.

**NEW WHEEL LOVELL.**—Charles Bowden, J. Price, Nov. 25: The lode in the 80, east of great cross-course, is 4 ft. wide, producing good stones of tin—a very promising lode. The part of the lode carrying in the 40 east is 4 ft. wide, and worth 30s. per fathom. We find there is more lode standing south, and cutting in that direction have found some good work for tin, which from appearances is likely to lead to something valuable. The rise in the back of this level is worth 15s. per fathom. The 50 fm. level end east is poor; this level is approaching the cross-course. The lode in the slopes in back of this level is worth 30s. per fathom. The lode in the 60 fm. level end east is 4 ft. wide, and is of a fine looking lode, and producing a little tin—a fine looking lode. The winze sinking below the 60, west of Lanyon's, is 1½ ft. wide, worth 12s. per fathom, and improving as we sink. Colonel's shaft is also complete to the 40 fm. level. We shall commence to drive east and west next week. Both ends of the shaft are producing good work for tin.

**NEW WHEEL TOWAN.**—Richard Pryor, Nov. 24: The lode in the adit level driving west continues to improve, and the end letting out more water, which is a favourable indication.

**NORTH CROFT.**—J. Virian and Son, W. Thomas, Jun., Nov. 25: The lode in the engine-shaft, sinking under the 208, is composed principally of flookan and quartz. In the 208, west of Petherick's, the lode is worth 18s. per fathom for tin. In the 196, west of Petherick's, the lode is worth 14s. per fathom for tin. In the winze under the 150, west of Petherick's, the lode is worth 8s. per fathom for tin. In the 208, east of Praed's, the lode is composed of flookan and muddle. The other eastern levels are without change. The pitches are producing their usual quantities of tin.

**NORTH POOL.**—J. Virian and Son, R. Clymo, Nov. 25: In the 30 fm. level, east of sump-winze, on middle lode, the north and south branches are still divided, producing about ½ ton of copper ore per fathom. In the 24 fm. level east, on Ballarat lode, the lode presents a very promising appearance, being 1½ ft. wide, increasing in size, and yielding over ½ ton of ore per fathom. In the rise over, up about 3 fms., the lode is 1½ ft. wide, yielding 2½ tons of ore per fathom. In the 16 fm. level, east of Ballarat shaft, the lode is 1 ft. wide, yielding a little lead, and producing a little tin—a fine looking lode. The winze sinking below the 60, west of Lanyon's, is 1½ ft. wide, worth 12s. per fathom, and improving as we sink. Colonel's shaft is also complete to the 40 fm. level. We shall commence to drive east and west next week. Both ends of the shaft are producing good work for tin.

**NORTH RETAILLACK.**—G. R. Odgers, J. Harris, Nov. 24: The lode in the 20, north from No. 1 boundary shaft, is 3 ft. wide, of flookan and quartz, with some fine lead; we think we are nearing the east and west lode seen in the adit, or 10 fm. level, where we expected an improved lode.

**OKEL TOR.**—J. Rodda, Nov. 25: The lode in the 80 east is looking very well, and producing from 4 to 5 tons of ore per fathom. Trengrove's slope, in the back of this level, will yield 4 tons; Treolar's slope will yield 4½ tons; and Wulke's slope will yield 3½ tons of ore per fathom. In the 40 wds. we are driving by the side of the lode. The lode in the 65 east is composed of capel, spar, peach, and muddle. In the 50 east the lode will yield 1 ton of ore per

fathom; there is more water coming from the lode here, which may be regarded as a promising feature. The lode in the 50 west is not producing much muddle as formerly; it is letting out a little water, and its general appearance indicates ore being near the western part of the great cross-course.

**OLD GUNNSLAKE.**—F. Phillips, Nov. 24: Parker's Shaft: There is no alteration in either lode or ground since last report; the lode fully maintains its kindly appearance, and the ground continues favourable; about 4 ft. have been sunk. In the cross-cut the ground also is very favourable for progress; about 1 fm. 4 ft. have been driven, but no lode cut. In the deep adit west I have to day put them to cut into the lode, and hope to be able to tell what it is composed in my next.

**PEDN-AN-DREIA UNITED.**—Wm. Tregay, J. Thomas, Nov. 20: Sump: The lode in the 140 fm. level west end is worth 60s. per fathom for 6 ft. wide, and no north wall. We have interested some branches in the 120 north; but there is much water still issuing from the end. The 120 winze has been communicated with the 130 fm. level. The ground in the 100 east rise is favourable for rising, and good progress is being made. Gobblers', Martin's Lode: The lode in the 120 fm. level west end is but slightly productive, and lets out much water. Skinner's Lode: The 110 fm. level east winze has been communicated with the 120 fm. level. The north lode in the 90 west is worth 15s. per fathom. The part of the lode carried in the 90 rise is worth 7s. per fathom. The lode in the shaft sinking below the 55 is worth 30s. per fathom. The lode in the 55 east is worth 10s. per fathom. The lode in the 55 west is worth 25s. per fathom. The lode in the 47 east is worth 15s. per fathom. The lode in the 47 west is worth 10s. per fathom. There are no other changes to report.

**PENALIS.**—S. Bennett, W. Higgins, Nov. 20: The ground continues much the same in the 80 north, but no lode cut as yet. The 70 east continues without much change. The lode in the rise above the 70 west is worth 10s. per fathom. In the 60 west the lode is thin, and very wet. The 50 west, on the north lode, is worth 10s. per fathom; the same lode east is large and saving work, but not very rich. The 45 east, on the new lode, is worth 8s. per fathom. At the Pink Mine both the 40 and 30 fm. level ends, west from the Shop shaft, are without change; the 30 fm. level west, however, and the Ennor's shaft are improved, the former being worth 8s. per fathom, and the latter 10s. In the course of two or three days we have completed the water in fork at the West Pink.

**PENHALE UNITED.**—R. Pryor, H. Bennetts, J. Pryor, Nov. 24: The tin-work bargains and tribute pitches throughout the mines continue just the same as when last reported on. Friday next being our pay and setting a full report shall be sent you.

**PENHALE WHEAL VOIR.**—W. H. Martin, Nov. 23: The engine-shaftmen are now employed putting in a collar at the 120, and to-morrow we shall commence to drive to cut the lode; we shall push on here with all speed, as we are desirous of seeing the lode, where we expect a good improvement, judging from the favourable change of the ground; and after we get in a fathom or two from the shaft, we will then cut the plat preparatory to sinking below this level, and continue the driving at the same time without hindrance. We are making satisfactory progress in cutting ground for the bob-plat at the 74, and from present appearances, by the end of next month we shall have the bob in and working. At Kitchie's our progress this week has been retarded, owing to a few days' stoppage, we have been compelled to go down and put in a machine we have in the mine; from the strong water issuing from the end I think we are near the lode.

**PERRAN CONSOLS.**—Wm. Johns, Nov. 24: The sinking of the flat-rod shaft is progressing very satisfactorily, and is opening out a large quantity of tin ground. The 10, west of shaft, is worth about 5s. per fathom. The slopes in back of this level are worth 4s. per fathom. The rise in back of the 20, west of Cowling's shaft, will shortly be holed to the 10, east of flat-rod shaft, and will lay open a large quantity of tin ground. There are no tin tributaries working throughout the mine, varying from 10s. to 3s. 4d. in 1 ft. The dressing is going on in the usual way, and no doubt there will be an increase from the last sampling. On the whole, the mine never looked better than it does at the present time.

**REDMOOR.**—F. Bennetts, Nov. 25: In taking down the lode in the 25 fathom level west we find it opening, and has a kindly appearance for improvement, at present worth 18s. per fathom. The steam-stamps are working well, and we are preparing the dressing-floors with all speed. We are not able to do much with the water pumps.

**ROARING WATER.**—H. Thomas, Nov. 23: We are making good progress in driving the 45 west of Gillman's shaft, on Grady's lode. I see very little change in the end during the past week; the character of the rock is very similar to that in the western part of the mine, where we had rich bunches of ore. We are pushing on towards this point as fast as we possibly can.

**SOUTH CONDURROW.**—Joseph Vivian and Son, Nov. 25: We cannot report any change in any part of the mine since last week's report. We have commenced driving from the bottom of the winze, under the 61, west of King's shaft, to communicate with the 72, there being about 4 fathoms between the two points. When this is accomplished, it will lay open a large section of additional stopping ground.

**SOUTH HERODSFOT.**—W. Goldworthy, Nov. 25: There is no change in the cross-cut in the 100 this week; the ground is of the same character as last reported on. The engine and pitwork are in good order, and the water easy.

**TAMAR VALLEY.**—J. Goldworthy, Nov. 25: In the 57, driving east of Wm. Jones' quarry, the lode is 1½ ft. wide, and good progress is being made. The lode in the 27 south is 1½ ft. wide, composed of fluor-spar and muddle, and produces 6 cwt. of lead ore per fathom—a very promising lode. No change in the tribute pitches to notice since last reported on.

**SOUTH MERLLYN.**—H. R. Harvey, Nov. 25: Vickers' Shaft: We completed the operation of cutting down on Monday last, and have secured the ground at the 20, as I stated would have to be done in my last. The men commenced drawing on Tuesday morning, and I am happy to say our lead and stuff was all to surface to-day, the men having worked the night upon it; the lode is very rich, and the tin shares at the present low quotations are very valuable. The 40, north and south, where the nature of the ground leads us to anticipate some good work from these ends. Two men are to stop in the 40 south next week, and the same number in the 40 north; in the latter a rise will be put up, and the ground taken away. We shall likewise sink a winze to the 50, at about 10 fms. in from Vickers' shaft; six men are to sink this shaft to the 50, and we can then drive out north and south. The dressing-shed is nearly completed, and our washing-floor will be ready by the time the lode is reached.

**ST. UST ALGAMATED.**—R. Pryor, Thos. Gundry, N. Bartie, Nov. 23: Saveland's Lode: The lode in the 100, driving east of engine-shaft, is producing saving work for tin. The same remark will apply to the 100, driving west of shaft. The lode in the 90, driving west of shaft, is worth 6s. per fathom. In the slopes in the back of this level the lode is worth 5s. per fathom. The lode in the 76, driving west of shaft, is 3½ ft. wide, and yielding stones of tin, but not to value. Pryor's Lode: The lode in the 100, driving west of cross-course, is worth 2s. per fathom. The lode in the 40, driving north of Reddipier shaft, is worth 5s. per fathom. The lode in the 10, driving north of West Buck shaft, is worth 5s. per fathom. The lode in the adit driving north of ditto is improving, and promising good stones of tin. No other change.

**VAN CONSOLS.**—T. Corfield, Nov. 25: We have reached the footwall of the lode in the cross-cut at the 39 without finding any further alteration in the lode. Although we have discovered no lead here I consider, from the widening of the lode, and the fact that there is a very great chance of our shortly discovering a good course of ore; in continuing this level we may expect changes in the lode every fathom we drive. I have set 10 fms., at 4. 10s. per fathom. All other work in this mine is going on well. The masons have made good progress in building the wheel-pit this week.

**VAN UNITED.**—S. M. Ridge, Nov. 25: Since my last the ground is stronger for sinking, and the water much increased, so that I recommend the suspension of this for the present. The shaft below Hollingsworth's level of the lode is still open, and the men are now driving the lode to the top of which I commenced at once, and also put out a cross-cut into the lode from the north.

**VIGRA AND CLOGAU.**—W. J. Cooke, Nov. 18: St. David's Lode, No. 2 Mine: Since the 11th inst. there is not much alteration to notice in the level driving east from No. 6 shaft; fair progress continues to be made. The western level is being driven by three men; part of the quartz looks exceedingly well. All other works progress satisfactorily.

**VIGRA AND CLOGAU.**—W. J. Cooke, Nov. 2 Mine: In the level driving towards the great cross-course the lode is about 3½ ft. wide; it continues rather flat, and good progress is being made. The lode in the western level is without change. All other work progresses satisfactorily.

**WEST CARADON.**—W. Johns, N. Richards, Nov. 23: No particular change has taken place in the mine since the report sent you for the meeting. Marina's Shaft: The 42, east and west of winze, on Allen's lode, in each of the ends the lode is worth 2 tons per fathom. The 30 east is still disordered by the crossing of the lode, and the 42, west, is also disordered. The cross-cuts at the 42, both north and south, as well as the sinking of the shaft, are going on very satisfactorily.

**WEST DRAKE WALLS.**—Thomas Gregory, Nov. 24: The lode in the 40 west is 2½ ft. wide, containing a little muddle and copper ore, but not as yet to value. In the 40 east we are driving by the side of the lode, in favourable ground for progress and mineral. In the 40 cross-cut south the ground has improved, and better progress is now being made. We have lately passed through some small veins and sandy floors, containing some copper ore, intermixed with good stones of tin. Water issues freely from the end, which is being pushed on by a full force of six men. We are making good progress in sinking the engine-shaft for a 55 fathom level. The kills in the bottom of the shaft is now of a deep blue colour, which contains numerous veins of muddle, copper, and tin ores, and is altogether promising.

**WEST GODOLPHIN.**—John Pope, Nov. 23: Hope lode, in the 35 fathom level, driving east of Paul's shaft, is 10 in. wide, low-price tin. In Salt's shaft, sinking below the 15, the lode is 15 in. wide, opening tribute ground. Caunter Lode: In the deep adit level, driving south-east of Pressure shaft, the lode is 1 ft. wide, saving work for tin. There is no other change worthy of notice.

**WEST MARIA AND FORTESCUE CONSOLS.**—Wm. Skeels, Jas. Donnal, Nov. 24: West Maria Lode: The lode in Willeford's shaft is 4 ft. wide, composed of spar, capel, muddle, and copper ore, worth 15s. per fathom; the ground is easier, and the lode steadily improving. The lode in the 60 east is worth 20s. per fathom (for the part carried, 4 ft.); the ground is also easier, and worth 50s. per fathom. The lode in the 60 fm. level west is 5 ft. wide, and worth 50s. per fathom. The lode in the slopes in the back of the 60, east and west of shaft, is worth on an average 20s. per fathom. No change in any other part of the mine, in consequence of the lode not being taken down. The machinery is all in good working order, and the works throughout are progressing satisfactorily.

**WEST ROSE DOWN.**—John Truscott, Nov. 23: The ground in the 85 fathom level cross-cut, north of Seccombe's shaft, is tolerably favourable. In driving east on the lode or branch in this level the lode is worth 20s. per fathom. We are making good progress in driving the 75 fathom level cross-cuts north and south. Rose Down lode, in the 90 west, is from 3 to 4 feet wide, yielding from 1 to 2 tons per fathom.

**WEST TOLGUS.**—Nov. 24: Taylor's sumpmen are at present cutting tip-plate below the 105. The lode in the 105 east is 5 ft. wide, producing from 2 to 3 tons of ore per fathom, worth 10s. per fathom. In the 105 west the lode is 5 ft. wide, yielding from 4 to 5 tons of ore per fathom, worth from 20s. to 25s. per fathom. In the 95 east we are driving north, but thus far have not met with any more lode in the direction. The lode in the 95 west is 18 in. wide, consisting chiefly of flookan and soft spar. We have four stopes over the back of the 95, three west of Taylor's engine-shaft and one to the east of said shaft, by 24 men, the value of which we estimate to be, as follows:—one at 40s. and two at 30s. per fathom each, and the eastern stope at 22s. per fathom. The lode in the rise over the 85 is 2 feet wide, consisting of spar and capel, producing occasional stones of ore, but not of much value. We have two stopes over the back of the

85 working by 12 men, at an average price of 3s. 2s. 6d. per fathom—one is worth 15s. and the other 12s. per fathom. In the 55 west the lode is 3½ ft. wide, composed of spar, blende, and muddle, with spots of ore. The men are now taking down the lode in Richards' shaft; it consists of spar, capel, blende, muddle, and is producing stones of very good ore. We cannot say what size the lode is, as it is not taken down to the south wall.

**WEST WHEAL TREMAYNE.**—S. Roberts, Nov. 24: We are still driving the cross-cut south, which is now about 5 fms. beyond the branches which we first cut the west side of the cross lode, and about 2 fms. east side of the cross lode, which makes a heavy by the cross lode of about 3 fms. nearly. We have not yet cut the south or main part of the south lode. At the adit level they are 3 ft. apart, and at 17 fms. deeper they are over 4 fms. apart; consequently, at the 44 fm. level we may expect to find a still greater distance between them. The cross-cut is yielding a deal of water, which indicates there is still another part of the lode before it. We sampled on Tuesday a little over 25 tons copper ore.

**WHEAL AGAR.**—E. Rogers, Nov. 24: The lode in the engine-shaft, sinking under the 130, is 4 ft. wide, producing saving work for tin. The lode in the 130, east of shaft, is at present small, but of good quality tinstuff. The lode in the 130, west of shaft, has not been taken down for the last week. There is nothing new to report on in the flat-rod shaft or in the 170 cross-cut.

**WHEAL BULLER.**—J. Inch, J. Brown, Nov. 24: Setting Report: The 102 to drive east of Hocking's shaft by six men, at 15s. per fathom; the lode in this end is large, producing low quality work for tin. The 80 to drive west of this shaft, on the north lode, by four men, at 14s. per fathom; the lode in this end is producing stamping work for tin. A stope under the 70, on the lode, to four men, at 10s. per fathom, worth for tin 10s. per fathom. No. 2 stope, under this level, to six men, at 5s. per fathom, worth for tin 10s. per fathom. A stope in the back of this level by four men, at 6s. per fathom, worth for tin 9s. per fathom. A stope under the 60, west of the cross-course, by six men, at 5s. per fathom, worth for tin 10s. per fathom. The 92, to drive east of Stevens' shaft, to two men, at 11s. per fathom; the lode in this end is producing good stones of tin and copper ores. The 92 to drive north by four men, at 12s. per fathom; this end is to cut through the north part of the lode, which is producing tin. The 80 to drive east by four men, at 12s. per fathom; the lode in this end is producing stamping work for tin. A stope east of Sparg's winze, in the back of this level, by six men, at 5s. per fathom, worth for tin 15s. per fathom. A stope west of this winze to six men, at 6s. per fathom, worth for tin 15s. per fathom. A stope under the 50, west of Kistie's shaft, to three men, at 7s. per fathom, worth for tin 10s. per fathom. We have sent to smelting-house to-day about 11 tons of black tin.

**WHEAL CREBOR.**—J. Goldworthy, Nov. 24: The widening of the 117 fm. level, west of Kelly's shaft, is being forced on, and good progress is being made; we hope to complete this work in a few days, and begin the driving. In the 12 fm. level, driving east of Cock's shaft, the lode is 1½ to 2 ft. wide, composed of capel, quartz, muddle, and a little copper ore. The stopes in the bottom of the 18 fm. level, east of Cock's shaft, and west of Crossman's winze, are set on tribute, at 8s. 6d. in 1 ft. In the 96 fathom level, driving west, on south lode, the driving is being continued by the side. In the winze sinking below the 84 fm. level, east of Cock's shaft, the lode is 3½ ft. wide, and promising, producing 2 tons of copper ore per fathom. The pitches are without change.

**WHEAL GREENVILLE.**—G. R. Odgers, W. Bennetts, Nov. 20: There is no change in the 140, west from the new shaft. The lode in the 110 east has not been taken down, the men are desuing the lode, but which we hope to take down next week, when you shall be fully advised of its appearance, &c. The lode at the 100 east is 2½ to 3 feet wide, producing from assay good work for tin, worth 12s. per fathom—this is a very kindly lode. The lode in the 90, east from the north shaft, is 2 feet wide, worth 7s. per fm., and producing rich stones of tin; the ground here is very easy, being full of water, where we found a good bunch of tin, and this being all whole to the surface we have strong hopes of making a similar discovery. The lode in the 90, west from cross-cut, is 2 ft. wide, a strong lode with good branches of tin throughout, imbedded in a good granite, worth 14s. per fathom. In the 66, east from the new shaft, we have placed the men to strip down the lode which we find is standing in the north side, and we will report its value next week. The lode in the 54 east is worth 3s. per fathom, and the lode in the 54 west is worth 10s. to 12s. per fathom. All the other places are looking pretty much the same as we stated in our former report.

**WHEAL KITTY (St. Agnes).**—Wm. Polkinghorne, S. Davey, Nov. 20: All our bargains throughout the mine are much the same in value as reported last week for the quarterly meeting; we then mentioned that a very promising lode had been discovered in the western part of the mine, and from working this week we find it about 2 ft. wide, with a regular underlay north; to-day we have broken some splendid work for tin from it, about 3 feet from the surface only. We shall not say anything further of the lode for two or three weeks, as the men will be busy in bringing it to a level to it.

**WHEAL SPARNON.**—W. Tregay, Nov. 20: The 30, west of cross-course, produces some good stones of copper ore, but the lode here is still small; and, as we think it expedient to push on the cross-cut to the lodes further north, as we believe some of these north lodes to be of considerable importance.

**WYE.**—John Paul, Nov. 20: Murchison's engine-shaft is 2 fms. under the 14, and plat now being cut. When this is completed sinking will be resumed by six men. The 14 fm. level cross-cut, north from this shaft (or 22 fms. from surface), is out 8 fms., and driving forward by six men; 7 or 8 fms. more will intersect the lode. In the adit level, going west, the lode is very large, producing occasional stones of lead ore.

## [ADVERTISEMENTS.]

From Mr. EDWARD COOKE:—The present state of the tin market is far from satisfactory, owing to the temporary difficulties of certain parties engaged in the metal trade, and which was alluded to in the Journal of last week. Holders of shares in tin mines would be very unwise to allow themselves to be misled by the present low quotations of tin, and to sell their shares at a price which would be a further 5s. per ton (but I do not think that is probable) it would scarcely justify the decline that has already taken place in the price of shares in tin mines. Established tin mines, such as Great Wheal Vor, Providence, Wheal Margaret, &c. The present is a favourable opportunity to buy into these and other tin mines. EAST LOVELL shares have risen considerably. This is no more than I anticipated, as will be seen by my advertisement in last Saturday's Journal. The dividend will be paid, with every prospect of a continuance. This should encourage the shareholders in the adjacent mines, East Wheal Lovell, to expect an early discovery of tin in that very promising mine, the shares in which at the present price are well worth buying. The engine has now been set to work, and the several lodes in this set will have a fair trial. I have stated on former occasions that the character of this district (now one of the richest in Cornwall) is to produce tin very close to the surface. This has been proved in the case of Old Wheal Lovell, which gave 180,000 lb. to the shareholders of the 20 fms. level, which has returned a large profit, and at the present time is one of the best tin mines in the county; and, lastly, East Wheal Lovell, which is returning about 17500 lb. profit per month. The whole of these mines have proved rich almost close to the surface. East New Lovell contains some of the same lodes, and any day a good discovery of tin may be made. The shares stand at a very low price, the mine free from debt, and in the absence of any discovery of tin, the calls will not, I believe, exceed 2s. 6d. per share quarterly. New Lovell is also looking very well, and at the next meeting no doubt the affairs of the company will be placed on a satisfactory footing.

Lead mines are just now in most favour. The market for this metal may be said to be healthy. The VAN MINE continues to open up large quantities of ore, and the sales are being increased, consistent with making the mine a safe permanent investment for many years to come. BVLCH CONSOLS are an excellent lead mine, and has been worked for several years past by a few gentlemen, in almost a private manner. The estate of Sir Charles Price held 1000 shares out of the 1500 of this mine, and this lot of shares, being recently been disposed of, they have become disseminated. The reserves of lead in the mine are said to be equal to two years' raising, at the rate of 50 tons per month, without any further discoveries. In a productive lead district like this it is next to impossible that further discoveries will not be made. Bwlch Consols adjoins the GOGINAN MINE, that has produced large quantities of lead, and the lodes of which mine traverse the former set. In a short time the north lode will be intersected, with every prospect of the best being found productive, in which case the dividend will be considerably increased. BROWNFOLD set, on the 16th inst., 70 tons of lead, at 13s. 10s. 6d. per ton. The mine has much improved of late, and the driving of the 83 fathom level is looked forward to with much interest. The shaft is expected to be down to the required depth for that purpose about the end of next month. When this is accomplished, I have no doubt the returns of lead, and consequently, the profits, will be greatly augmented. In the meantime, Brownflood may be considered a steady dividend-paying mine. The accounts from GREAT ROCK MINE are still of a very favourable character. The operations have been impeded by the delay on the part of the founders in not sinking in the machinery of the crusher. The opening up of the

rock, weighing more than 10 cwt., is reported to have been one-half clean copper of the richest quality.

At GREAT ROYALTY, the adit has now nearly been cleared, and the water drained. The works are being pushed forward as rapidly as possible, and one month after the engine goes to work there will be a good batch of tin for sale, which will leave a first-rate profit on the cost of production. This mine has only been at work about seven to eight months, and yet, although it is a young mine, immense quantities of tinstuff have been discovered, so great, indeed, as to necessitate the erection of a much larger amount of machinery to work it on a more extended scale than was at first contemplated. The shares are amongst the cheapest in the market, and the writer reiterates his conviction that those who purchase now will see a handsome profit in the course of the next few months.

**BRITISH ENTERPRISE IN GERMANY.**—The energy displayed by the Messrs. Mulvany in opening out the collieries in Westphalia, with which they have connected themselves, has long been fully recognised in that district, although, owing to the habitual cautiousness of the Germans, there were many who predicted that their supply of funds would cease ere they attained success, and that the heavy expenditure made upon their responsibility by the Prussian Mining and Iron Works Company (Preussische Bergwerks und Hutten Actien-Gesellschaft) would create a bad impression upon the minds of English capitalists, and thus discourage British enterprise in Germany for the future. The mere thought of expending 300,000l. in opening out a property, and in the meantime foregoing almost all returns, was looked upon as little less than madness; yet, from the report of the meeting of the company, held at Dusseldorf, on Nov. 15, and referred to in the Supplement to this day's Journal, it is evident that Messrs. Mulvany and their colleagues well understood their business, the vast establishment having more than covered expenditure during the year reported upon, whilst the present output is such that ample profits may be expected hereafter, and that, too, during the time that the priority obligations are being extinguished. The Erin and Hansa Collieries are now turning out close upon 500 tons of coal per day, and steadily increasing; the company's three blast-furnaces are now producing 90 tons of iron per day, and the yield will soon amount to 100 tons daily; and the company hold rich mineral concessions, which can be profitably wrought as occasion requires. With affairs in such a position, and with such excellent prospects, it is not surprising that, notwithstanding the state of speculation in this country, one-half of the company's 5 per cent. priority obligations were readily placed, and a feeling of their complete security created, which will ensure the satisfactory placing of the remainder when further funds are required.

**DON PEDRO COMPANY.**—Upon a subscribed capital of 53,313l. there has been already returned in dividends no less than 151,000l., while the current aggregate market value of the property is something like 330,000l. There have been raised nearly 700,000 oits. of gold, the gross proceeds of which amount to nearly 300,000l. The difference between the divided profits (151,000l.) and the actual profits (170,000l.) is made up by the reserve fund of 7000l., income tax upon dividends, preliminary expenses written off, balance at bankers, &c. At the meeting, yesterday (Mr. Henry Haymen in the chair), a dividend was declared for the three months ending September at the rate of 100 per cent. per annum upon the subscribed capital of the company, leaving 5255l., and the profits for September, amounting to 3037l., to be carried forward towards the next quarterly dividend. From the details of the meeting (reported in another column), it will be seen that the explanations afforded by the Chairman were received with the unanimous thanks of the shareholders.

#### DON PEDRO NORTH DEL REY GOLD MINING COMPANY (LIMITED).

At an EXTRAORDINARY GENERAL MEETING of the proprietors of the above company, held on Nov. 26, 1869, at the London Tavern, Bishopsgate-street, pursuant to notice,

HENRY HAYMEN, Esq., in the chair,  
It was proposed by the CHAIRMAN, seconded by SAMUEL J. WILDE, Esq., and carried unanimously:—  
“That an interim dividend of THREE SHILLINGS and SIXPENCE PER SHARE (being at the rate of 100 per cent. per annum), free of income tax, be and is hereby declared for the quarter ending Sept. 30, 1869.”  
HENRY HAYMEN, Chairman.  
JOHN E. DAWSON, Managing Director.  
52, Moorgate-street.

#### NOTICE.

**NEVADA FREEHOLD PROPERTIES TRUST.**—The FINAL CERTIFICATES of this TRUST will be READY to be EXCHANGED for SCRIP CERTIFICATES on and after SATURDAY, the 27th inst. The Trustees have also to notify that Major General MASON, one of the Trustees, was delegated by the Trust to proceed to Nevada to investigate the Title, and to take possession of the several properties of the Trust; and that he has transmitted a telegraphic despatch to this office to the following effect:—  
“Title perfect; properties better than represented; took possession last Saturday; report forwarded.”—Austin City, Nov. 24, 1869.”  
And Notice is hereby given that, pursuant to the prospectus of the Trust, a MEETING of the CERTIFICATE HOLDERS will be HELD at the London Tavern, in the City of London, on TUESDAY next, the 30th inst., at 1 o'clock, P.M., to appoint a Committee in the terms of the Trust Deed.  
C. H. THOMAS, Secretary pro tem.  
22, Moorgate-street, E.C., Nov. 25, 1869.

#### PONTGIBAUD SILVER-LEAD MINING AND SMELTING COMPANY.

The ORDINARY ANNUAL GENERAL MEETING of the shareholders of the above company will take place in Paris, at the offices of the company, No. 24, Rue Richer, on TUESDAY, the 8th day of November instant, at Twelve o'clock at noon precisely.  
And an EXTRAORDINARY GENERAL MEETING will be held at the same place, immediately after the Ordinary General Meeting, to consider certain modifications of the “statute.” The qualification to take part in this meeting is the holding of twenty shares, which must be deposited at the offices of the company in Paris, or at the Agency in London, ten days before the meeting takes place. Shareholders may be represented by proxies at the meeting; but no one can be the bearer of a proxy unless he himself is the owner of twenty shares.  
Proxies must be upon French stamped paper, and according to the form, which can be obtained at either of the offices of the company.  
JOHN TAYLOR AND SONS.  
London Agency, No. 6, Queen-street-place, Nov. 18, 1869.

#### PRUSSIAN MINING AND IRONWORKS COMPANY (LIMITED).

(PREUSSISCHE BERGWERKS- UND HUTTEN-ACTIEN-GESELLSCHAFT.)  
BALANCE-SHEET UP TO 30TH JUNE, 1869.

ACTIVA.	
1.—Immovable Property:—	
Vulkan Iron Works .....	Thrs. 381,203 27 10
Hansa Colliery .....	111,239 27 0
Erin Colliery .....	583,889 15 10
Zollern Colliery .....	584,694 29 6
2.—Engines, Machinery, Plant, Tools, and Furniture:—	
Vulkan Iron Works .....	Thrs. 187,946 23 11
Hansa Colliery .....	25,672 10 10
Erin Colliery .....	133,761 18 8
Zollern Colliery .....	95,842 15 11
Head Office .....	113,237 3 11
3.—Stock of Iron, Coals, Ores, and Materials, and Cash Account:—	
Vulkan Iron Works .....	Thrs. 163,531 12 5
Hansa Colliery .....	25,827 8 4
Erin Colliery .....	10,847 3 0
Zollern Colliery .....	8,096 22 11
Head Office .....	7,485 2 9
4.—Sundry debtors .....	2,941 28 9
Total .....	Thrs. 2,806,904 22 5
PASSIVA.	
1.—Share capital .....	Thrs. 2,400,000 0 0
Of which, reserved for later emission ..	302,400
Not yet called up on 30th June .....	613,280—915,680 0 0=1,484,320 0 0
(Thrs. 230,040 of this sum called up since.)	
2.—Priority obligations .....	Thrs. 1,300,000
Of which placed up to 30th June .....	Thrs. 156,000 0 0
(Thrs. 411,000 more placed since.)	
Borrowed on security of obligations .....	550,000—
3.—Arrears of purchase price (payable in nine yearly instalments) .....	768,000 0 0
4.—Advances on account of later payments (by two shareholders) .....	168,607 25 7
5.—Bank credits .....	143,658 19 4
6.—Sundry creditors .....	151,968 3 0
7.—Bills accepted .....	122,876 25 4
8.—Interest on shares .....	30,383 9 2
Total .....	Thrs. 2,806,904 22 5

THE DIRECTOR: THS. J. MULVANY.

Audited, and found correct and corresponding with the books.  
THE COMMISSIONER OF AUDIT: H. C. CRUYS; GUSTV. ARNDT.  
Dusseldorf, November, 1869.

With this week's Journal a SUPPLEMENTAL SHEET is given, which contains: Prof. Smyth's Lectures at the Royal School of Mines—Original Correspondence: Coal-Breaking Machinery (J. Jones, S. P. Bidder); Notes on Coal Mining in Monmouthshire (M. B. Gardner); the Channel Passage; International Communication by Crossing the Channel (W. Austin); Mineral Wealth of Spain (H. Sewell); On the Assays of Silver Ore, No. IV. (T. L. Phipson); East Wheel Lovell; Mining in Cardiganshire (S. Trevelyan); Mining in North Wales; Nanteos Consols Mines; Virtuous Lady Mine (T. J. Barnard)—Meetings of Public Companies: Prussian Mining and Iron Works Company; Governor and Company of Copper Miners in England—Review: The Science of Investment (Messrs. Trevelyan and Co.)—Mineral Resources of Ireland, the Donegal Granites, &c.

With last week's Journal a SUPPLEMENTAL SHEET was given, which contains—Prof. Smyth's Lectures at the Royal School of Mines—J. Grafton Jones's Machine for the Prevention of Colliery Explosions (Illustrated)—J. and J. Hyde's “Perfect Safety Lamp”—Salt Bed at Middlesbrough (W. H. Peacock's Paper, read before the Cleveland Literary and Philosophical Society)—Original Correspondence: Strolls in the Black Country; Iron Works and Coal Mining in Monmouthshire (M. B. Gardner); Experiments with Safety-Lamps; Chemistry of the Mine; North Trekerby Mine (R. Pryor); Copper Mining in Cornwall; On the Assays of Silver Ores, No. III. (T. L. Phipson); Rich Silver Ores of Old Treburgett (R. Talling); Mineral Wealth of Spain, No. IV. (B. H. Howarth); New Quebrada Company; Rosewall Hill and Ransom Mines, &c.

#### The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, NOV. 26, 1869.

COPPER.		IRON.	
Best selected, p. ton	74 0 0—75 0 0	Bars Welsh, in London	7 0 0—
Tough cake and tile	73 0 0—74 0 0	Do, to arrive	7 0 0—
Sheeting and sheels	73 0 0—	Nail rods	7 0 0—
Boils	73 0 0—	Do, in London	10 0 0—
Bottoms	81 0 0—	Bars ditto	8 7 6—9 0 0
Old (Exchange)	65 0 0—	Hoops ditto	9 0 0—10 15 0
Burra Barre	73 0 0—73 10 0	Sheets, single	10 0 0—12 0 0
Wire	0 10 0—0 11 0 1/2	Pig No. 1, in Wales	3 15 0—4 5 0
Tubes	0 11 1/2—1 0	Refined metal, ditto	4 0 0—5 0 0
BRASS.		STEEL.	
Sheets	per lb. 8 1/2d.—9d.	Do, mch. Tyneor Tees	6 10 0—
Wire	8d.—	Do, railway, in Wales	5 0 0—7 10 0
Tubes	10 1/2d.—11 1/2d.	Do, Swed. in London	10 0 0—
Yellow Metal Sheet, p. lb.	6 1/2d.—7d.	To arrive	10 0 0—
Sheets	6 1/2d.—	Pig No. 1, in Clyde	2 15 0—3 2 6
SPELTER.		QUICKSILVER (p. bottle)	
Foreign on the spot	£19 15 0—20 0 0	Do, Nos. 3, 4, 5, 6, 7, 8, 9, 10	6 2 6—7 0 0
Do, to arrive	19 15 0—20 0 0	Railway chairs	5 10 0—5 15 0
ZINC.		Do, spikes	0 12 0—0 13 0 0
In sheets	£24 0 0—	Indian Charcoal Pigs,	
TIN.		in London, p. ton	6 0 0—6 10 0
English blocks	123 0 0	Do, in London	6 0 0—6 10 0
Do, bars (in brls.)	124 0 0	Swed., in kegs (rolled)	14 0 0—
Do, refined	130 0 0	Do, (hammered)	14 15 0—15 5 0
Banca	£112 0 0—114 0 0	Ditto, in fagots	15 15 0—16 0 0
Straits	(nom.) 114 0 0	English, spring	19 0 0—23 0 0
TIN-PLATES.		LEAD.	
IC Charcoal, 1st qua.	1 6 0—1 8 0	English Pig, com.	18 17 6—
IX Ditto, 1st quality	1 12 0—1 14 0	Ditto, L.B.	19 5 0—
IX Ditto, 2d quality	1 4 0—1 6 0	Ditto, W.B.	19 5 0—
IX Ditto, 3d quality	1 10 0—1 12 0	Ditto, sheet	19 10 0—
IX Coke	1 2 0—1 3 6	Ditto, red lead	20 0 0—20 10 0
IX Ditto	1 8 0—1 9 6	Ditto, white	27 0 0—30 0 0
Canada plates, p. ton	13 10 0—	Ditto, patent shot	22 0 0—
Ditto, at works	12 10 0—	Spanish	18 7 6—

\* At the works, 1s. to 1s. 6d. per box less.

**REMARKS.**—It cannot be said that any material improvement has taken place in the Metal Market during the past week. A few orders have been given out, some of them for fair quantities, but generally the market has remained in the same lifeless and inanimate condition which it has exhibited during the preceding fortnight, nor does there seem any probability of a permanent improvement occurring during the remainder of the present year, which there now seems every likelihood will close under circumstances of considerable depression. We trust, however, that with the spring of next year, at all events, a much improved condition of the metal trade will be inaugurated, and a permanent recovery take place from the unsatisfactory condition which the trade has presented more or less throughout the present year. Prices have remained much the same during the week, with the exception of the metal referred to in our last report, which has continued its downward course, and there now appears every probability that we shall see much lower prices still, as it is not at likely that any recovery will take place, at all events, for some time to come. The intelligence from America, in a commercial point of view, is by no means satisfactory: it appears that the late panic on the Gold Exchange has exercised an unfavourable influence upon many parties engaged in mercantile pursuits, several failures having been already announced, and it is feared that others will follow ere long. It could not be otherwise than expected that something of this kind should occur after the excitement of late events had somewhat passed off. We trust, however, that it may not be so serious as it at present appears. The opening of the Suez Canal is an event of great importance, and one which will, doubtless, have a lasting influence upon the commerce of the world.

**COPPER.**—Advices have been received from Valparaiso, dated Oct. 17, reporting the charters to Oct. 15 to be 500 tons bar and 1300 tons ore and regulus. Notwithstanding the smallness of this quantity, however, the market remains inactive. English is obtainable under smelters' rates: 25 tons Burra have sold at 73l. 10s. cash, and 30 to 40 tons at 73l. Chili bar is quoted rather lower, at 66l. 15s. to 67l. cash. Ore at 13s. 3d. per unit.

**IRON.**—In Staffordshire a fair number of orders for finished iron have been received, and the disinclination of merchants and others to buy at the advanced prices appears to be giving way. On the whole, the prospects of the trade are tolerably cheerful. In Welsh, during the past week, a change has occurred in the American demand, buyers being evidently afraid that the tariff will be made still more stringent. It is probable, however, that this fear will be dispelled. Canadian advices are decidedly more favourable as to requirements next spring, more especially in rails and railway material. The continental demand keeps fairly good, engagements being offered on account of the Spanish and Italian markets. In Swedish iron supplies are at present very scarce, and the demand is by no means active. In Scotch pig-iron a gradual but steady improvement has taken place during the week, and a good deal of business has been done; prices have advanced to 55s. cash, and 55s. 1 1/2d. one month.

**LEAD.**—A moderate business has been done, but prices are somewhat easier.

**TIN.**—The market for foreign tin has been rather unsettled, but since the announcement that arrangements have been made by which all the tin held by a house which had been in difficulties, amounting, it is said, in all to about 1600 tons, part to arrive, will be taken by parties who have advanced upon it, at the rate of 114l. per ton, a rather better feeling has been evinced, as it is considered that this arrangement is very satisfactory, and the probability is that the market will be strengthened thereby. Previous to this arrangement, Banca had been sold at 110l. to 112l.

**SPELTER.**—The market remains inactive. The quotation for parcels on the spot is 19l. 15s. to 20l., at which sales are reported to have taken place.

**TIN-PLATES.**—No improvement has occurred in the demand. **STEEL.**—Very little stock of foreign now here. **QUICKSILVER.**—Still rather better business doing.

**THE IRON TRADE.**—(Griffiths' Weekly Report).—The Egyptian Government have given out a contract this week for a floating pier at the Red Sea end of the Suez Canal, which will consume 4000 to 5000 tons of plates and angle bars, but as the contract is given to a French house this large order for iron will, no doubt, be taken by the French ironmasters; however, it has justly been stated by good authority that the trade here is much influenced by the action of the French and Belgian masters, therefore this large order, whether given out here or there, will largely increase the commitments of the makers to the present

prices, and improve the prospects of the trade accordingly. Our market remains steady, with no change worthy of note since our last report; the demand continues to favour angles, ship-plates, boiler-plates, and marked bars of North and South Staffordshire makes, for which list rates are obtained. Tin-plates continue flat.—75, Old Broad-street, London, Nov. 26.

**THE COPPER TRADE.**—Messrs. James and Shakespeare.—By private contract sales of ore have been made at 13s. 4 1/2d. per unit, some of the Swan-on smelters giving a preference to this class of furnace stuff, and are even sold to have paid 13s. 6d. for a special parcel. Regulus is dull at 13s. 3d., only one transaction being reported at this figure. Business has been spoken of in bars as low as 66l. 10s., but later on 5s. and 7s. 6d. per ton advance thereon was paid, and, as a rule, holders have been firm at 67l.; owing to many of the lots being in second hands it is difficult to trace the quantity sold, or in all instances, especially at the lowest figures, the correctness of the reports. On Nov. 23 the Magellan steamer arrived from Valparaiso, bringing about 500 tons of bars to Liverpool, the charter for which had not been then advised. On Nov. 25 the telegram was known, and it gave the charters for the first fortnight: in October as equal to about 1800 tons pure, of which the 500 tons bars just mentioned constituted a part, the remainder being in ore and regulus. Australian sorts are neglected; rumours were current of sales made in Wallaroo and Burra cake, from speculative holdings, at 73l., but the only transaction at a low figure, and positively known, was in the latter brand at 73l. 5s. per ton; for Wallaroo ingots 75l. has been paid. Very little doing in English, a moderate business having transpired in well-known marks of tough from second hands at 70l. and 70l. 10s. per ton.

**Messrs. Vivian, Younger, and Bond.**—The business done this week has been under the recent average. A small quantity of Chili bars, perhaps about 800 tons, has been reported as sold for cash at from 66l. 10s. to 66l. 17s. 6d., according to brand. A cargo of regulus has been purchased at 13s. 9d., and some ore at 13s. 4 1/2d. Further sales of Burra are reported at 73l., and Wallaroo at 73l. 10s. English raw copper continues in small request, and second-hand lots of tough have been sold at 70l. 10s. in the docks. On the 25th inst. telegrams were received from Chili advising charters for the first half of October of 1800 tons pure copper—300 tons in bars and ingots, and 1300 tons pure copper in ores and regulus. On receipt of this news holders became firmer, and 67l. is now the lowest cash price for bars.

**Messrs. Henry Rogers, Sons, and Co.**—There is a strong disposition in some quarters to unduly depress this article, and, as legitimate demand is, for the moment, very light, the movement may succeed. Sales of bars have been reported as low as 66l. 10s.; regulus, 13s.; fine Australian, 73s.; and best brands of English tough, 71l. These low quotations from day to day of necessity alarm weak holders, and, no doubt, produce sales, whereas from the West Coast advices received by the two last mails there has been every reason to hope that copper had touched its lowest point. Speculation in the metal has quite died out, and, as no special demand is likely to occur for the rest of this year, it is not unlikely that those interested in bringing about a lower range of prices may for some little time have the market to themselves. Telegrams are at this moment to hand giving the charters for first half of October at 1800 tons fine copper.

The MINING SHARE MARKET has been more active this week, and in one or two stocks a large amount of business has been transacted. The chief shares dealt in have been East Lovell, Australian United, Bwlch Consols, Prince of Wales, Chontales, Tincroft, West Maria and Fortescue, Basset, Great Vor, Crebhor, Wheel Grenville, West Chiverton, North Trekerby, West Caradon, Bronfloyd, Marke Valley, and a few others. The standard for copper ores declined 2l. 15s., on Thursday, when the sale of ores (2628 tons) realised 12,669l. 16s. East Lovell shares have been in good demand, and have risen 2l. per share, and leave off 22 to 23. Bedford Consols, 2l. to 2 1/2; Bedford United, 30s. to 32s. 6d.; Caldbeck Fells, 32s. 6d. to 35s.; Chiverton Moor, 3 1/2 to 4; Chontales, 15s. to 17s. 6d.; Cook's Kitchen, 13 to 13 1/2; Ding Dong, 23 to 25; Dolcoath, 125 to 130; Don Pedro del Rey, 4 to 4 1/2; East Caradon, 6 to 6 1/2; East Gunnislake, 35s. to 40s. Prince of Wales, 23s. to 25s.; at the quarterly meeting, held on the 26th, the accounts showed a profit of 408l. 5s. 6d., a cash balance in hand of 2421l. 1s. 6d., and a statement of assets over liabilities of 1945l. 8s. 1d. This statement does not include October ores sold last week, nor the October cost payable this week, and on which there was a profit of about 150l. to 175l. A dividend of 1s. per share was declared. Since the last meeting the lode has been cut in the 77, worth 5l. per fm. east, and 6l. per fm. west; when first cut in the level above the lode was of no value. Particulars of the meeting, however, will be found in another column. East Seton, 1 1/2 to 2; Frank Mills, 3 1/2 to 3 3/4; Great Laxey, 19 to 19 1/2; Great North Laxey, 17s. 6d. to 20s. Great Wheel Vor shares have declined to 12 1/2, 13 1/2.

Marke Valley, 6 1/2 to 7 1/2; the ends on Marke's lode are now worth 4 1/2 tons of copper ore per fathom. Sarum lode is worth 3 tons per fathom, and Rose Down lode 11 tons per fathom. At West Rose Down the branch east, in the 85, is worth 1 ton per fathom; west, 1 ton per fathom. The Rose Down lode, in the 90 west, is 3 to 4 ft. wide, yielding from 1 to 2 tons per fathom. Mineral Bottom, 2 1/2 to 3; New Lovell, 27s. 6d. to 32s. 6d.; North Croft, 1 1/2 to 2. At Gonnema, Venning's lode, in the 138, is worth 2 tons of ore per fm.; winze, 2 1/2 tons. The stope in the back is worth 3 tons, and the stope in bottom 3 tons. Redmoor, 15s. to 17s. 6d.; the lode in the 25 west is improving, and worth 18l. per fathom. Bronfloyd, 3 1/2 to 3 3/4; the mine is reported as having improved. Bwlch Consols, 3 to 4; this mine has again sold 50 tons of lead ore for the month. North Trekerby, 12s. 6d. to 13s. 6d.; Okel Tor, 9s. to 11s.; Princess of Wales, 5s. to 7s. 6d., called paid; Providence Mines, 33 to 35. South Darren, 1 1/2 to 2; at the meeting a dividend of 2s. 6d. per share was declared. Spearn Moor, 18 to 20; Taquaril Gold, 12s. to 13s. Tincroft shares have advanced to 19 1/2, 20 1/2. Van, 38 to 40; West Caradon, 17s. 6d. to 22s. 6d.; West Frances, 37 to 39; West Seton, 17s. to 180; Wheel Basset, 35 to 40; Wheel Chiverton, 2 1/2 to 3; Wheel Crebhor, 11s. to 13s.; Wheel Grenville, 35s. to 37s. 6d.; Wheel Kitty, 5 to 5 1/2; Wheel Trelawny, 4 to 5. West Maria and Fortescue shares have advanced from 26s. to 31s., 33s. Hingston Down, 25s. to 30s.

The Market for Mining Shares on the Stock Exchange has been inactive, and there is nothing special to note. There have been a few exceptions, in which a rather considerable business has been transacted, but prices as a rule have remained without material alteration. At the present moment the Pacific Mining Company, which is on the eve of being brought before the public, is creating a great deal of attention. A very large and influential meeting was held on Thursday, at the London Tavern. Mr. Batters (the Chairman on the occasion) gave an account of the negotiations and purchases of the various properties of which the company is composed, the amount paid for them, and their present and prospective value. A full report will be found in another column. The whole of the shares have been applied for. The following are the closing prices:—Frontino and Bolivia, 21s. to 22s.; Chontales, 14s. to 16s.; Don Pedro, 3 1/2 to 3 3/4 prem.; St. John del Rey, 16 1/2 to 17; Anglo-Argentine, 1 1/2 to 1 3/4 dis.; Anglo-Brazilian, 3-16ths to 1-16th dis.; General Brazilian, 1 1/2 to 1 3/4 prem.; Port Phillip, 1 1/2 to 1 3/4 prem.; Rossa Grande, 1 to 1 1/4; Pestarena, 1 to 1 1/4; United Mexican, 3 1/2 to 4 1/4. In British descriptions Van shares are firm, at former quotations; the mine continues to improve; the works in the new portion are opening out most satisfactorily, and not inferior in indications to that of the older workings. East Lovell shares have been dealt in at an advance of 3l. above last week's prices; it is reported that the mine is looking better again; shares close 2 1/2 to 2 3/4. Van shares, 38 to 40; Great Wheel Vor flat, at 12 1/2 to 13 1/2; West Chiverton, 56 to 57; Chiverton, 3 to 3 1/2; Chiverton Moor, 3 1/2 to 3 3/4; East Caradon, 5 1/2 to 6 1/2; West Caradon, 1 1/2 to 1 3/4; Marke Valley, 6 1/2 to 7 1/2; Great Laxey, 19 to 19 1/2; Wheel Seton, 25 to 27 1/2; East Seton, 36s. 3d. to 38s. 9d.; Hingston Down, 22s. 6d. to 27s. 6d.; Prince of Wales, 24s. to 26s.

The PACIFIC MINING COMPANY, whose shares are quoted 11 1/2 to 12 1/2, held a very influential meeting (particulars of which will be found in another column) at the London Tavern, on Thursday, to hear Mr. Batters' statement in regard to the mines purchased by him in California and Nevada—Lander Hill, Union Hill, and Buckeye Hill—and which he proposed to form into a limited company, in 15,000 shares of 10l. each. The profits at present making by these mines he estimated at 2500l. per month, equal to a quarterly dividend of 10s. per share; and Captain Barratt and other agents who have inspected the mine gave it as their opinion that the prospects warranted the expectation of much greater profits in future. The total capital of the company, 150,000l., was at once subscribed for, and the shares are at a premium of 1 1/2 to 2. From a Californian paper of Oct. 30 the return from Lander Hill for one week is given as 15,378 ozs. of silver bullion.

The OLD TREBURGETT SILVER AND LEAD MINING COMPANY, to the formation of which, with a capital of 30,000l., in shares of 1l. each, reference has already been made in the Journal, has been well received by the public, the number of shares already taken being sufficient to enable the directors to give notice that the subscription list will be closed on Dec. 4. The discussion to which the proposition to turn the Cornish fahlers to commercial advantage gave rise is

considered to have proved beyond question that the ore is really valuable, and it is confidently anticipated that the working of fahlerz and the minerals associated with it in Cornwall will prove quite as remunerative as the working of the rich fahlerz mines of Scandinavia. The ore has been analysed both by Mr. D. Forbes, F.R.S., and by Dr. T. L. Phipson, and their analyses leave no doubt that the working of ore similar to that investigated by them would ensure success, regardless of the district in which it might be mined.

At Redruth Ticking, on Thursday, 2628 tons of ore were sold, realising 12,069l. 16s. The particulars of the sale were—Average standard, 95l. 1s.; average produce, 7½; average price per ton, 4l. 12s.; quantity of fine copper, 203 tons. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Oct. 21	2719	103	10	6½	£3 16 0	11s. 11d. £59 14 0
28	1994	92	11 0	8½	5 0 6	11 1½ 59 16 0
Nov. 4	1356	97	13 0	7½	4 6 0	11 11 59 10 6
18	3757	104	15 0	6½	3 18 6	12 4 61 10 0
25	2628	95	10	7½	4 12 0	11 11 59 9 0

Compared with last week's sale, there has been a decline in the standard of 2l. 15s., and in the price per ton of ore about 3s. 8d. Compared with the corresponding sale of last month, there has been a slight advance in the standard.

The Standards of Tin Ore are now as follows:—Common, 109s.; superior common, 110s.; fine, 111s.; superior fine, 113s.

At Botallack Mine meeting, on Nov. 19, the quarter's accounts showed a profit of 1074l. 2s. 6d. A dividend of 1200l. (6l. per share) was declared, leaving the credit balance 985l. 16s. 3d.

At Wheal Owles meeting, on Nov. 19, the accounts for three months, ending Sept., showed a profit of 370l. 18s. A dividend of 400l. (5l. per share) was declared, leaving the credit balance 1941l. 13s. 7d. Work performed during the quarter:—155 fms. 0 ft. 7 in. driven in levels, and 44 fms. 0 ft. 3 in. sunk in shafts and winzes; 49 pares stopping for tin on tutwork, and 20 pitches working on tribute.

At Wheal Jane (Kea) meeting, on Monday (Mr. Chas. Hawke in the chair), the accounts for July and August showed a credit balance of 1138l. 15s. 6d. The profit on the two months' working was 893l. 5s. A dividend of 768l. (1l. 10s. per share) was declared, and 370l. 18s. 6d. carried to the credit of next account. Captains W. Giles and W. Giles, jun., reported upon the various points of operation. They say they have a good and lasting mine, and a fair prospect that the future will continue to be satisfactory.

At South Darren Mine meeting, on Thursday (Mr. Swonnell in the chair), the accounts for the six months showed a credit balance of 1808l. 3s. 4d. It was announced that the works for the dividend of 750l. (2s. 6d. per share) would be sent out shortly. The report will be found in another column.

At West Basset Mine meeting, on Wednesday, the accounts showed—Balance carried over from last meeting, 1373l. 3s. 2d.; costs for August and September, 2808l. 19s. 10d.; advance on tribute, 156l.; bounty costs on account, 250l.; royalty, 162l. 7s. 10d.; sundries, 20l. 18s. 7d.—£4791. 9s. 5d.—Copper ores sold, 954l. 12s. 10d.; tin ore sold, 1633l. 10s. 3d.; advance on tribute, 150l.; balance, 2032l. 6s. 4d.—£1770l. 9s. 5d. A call of 13s. per share was made.

At the Governor and Company of Copper Miners in England special general Court, on Wednesday (Sir R. M. Stephenson in the chair), it was unanimously resolved that Sir R. M. Stephenson be elected Governor in the room of Mr. Haslewood, deceased, and that Mr. Harman be elected Deputy-Governor. The details of the extraordinary general Court (held last week) appear in the Supplement to this week's Journal.

The Cape Copper Mining Company, at a directors' meeting held yesterday, declared an interim dividend of 15s. per share, payable on Dec. 6, free of income tax, out of the profits of 1868 realised to date, the ore arrived up to present time having been 2142 tons, out of the 6537 tons raised during that year.

At the Imperial Silver Quarries Company adjourned special meeting, on Monday (Lord Ranelagh in the chair), the directors were requested to convene a special meeting for Dec. 6, for the purpose of carrying out the scheme of re-constitution recommended by the committee of shareholders and endorsed by the board. Details in another column.

At the Gold Mining Company of Yuba meeting, on Thursday (Mr. H. E. Ormerod in the chair), the necessary preliminaries were agreed to. Details in another column.

At the Norwegian Charcoal Iron Company meeting, on Nov. 16, Mr. Wm. Pare, the liquidator, stated that, "having in view the present position and prospects of the company, I think a favourable liquidation may be reasonably anticipated." It was unanimously resolved that "the thanks of this meeting be given to the liquidator for the great care and attention bestowed by him on the affairs of the company, and for the manner in which the liquidation is being conducted."

**COAL MARKET.**—This week brought us an arrival of 113 ships, and to effect sales a reduction in house coals of about 1s. per ton was submitted to; this had the effect of entirely clearing the market, which closed to-day with a slight upward tendency. Hartley coals quote a reduction of from 3d. to 6d. per ton. South Hetton Wallsend, 19s.; Hawthorn Wallsend, 16s. 6d.; West Hartley, 16s. 6d. Un-sold, nil; ships at sea, 40.

**EXPORTS OF COAL.**—By the Monthly Circular of Messrs. Higginson, Liverpool, we learn that the quantity of coal exported in October was 906,851 tons, against 929,364 tons in the corresponding month of 1868, showing a decrease of 22,513 tons. The particulars are—From the Northern Ports, 407,787 tons; Yorkshire, 29,607 tons; London, 5553 tons; Liverpool, 84,118 tons; Severn Ports, 294,485 tons; and Scotch Ports, 85,301 tons. The increase was—Liverpool, 23,422 tons. The decrease was—Northern Ports, 4707 tons; Yorkshire, 11,487 tons; London, 2381 tons; Severn Ports, 16,555 tons; Scotch Ports, 10,805 tons. Total, Jan. to Oct., 8,208,889 tons; Jan. to Oct., 1868, 8,588,339 tons: decrease, 379,450 tons.

The Bank of England return for the week ending on Wednesday evening showed in the ISSUE DEPARTMENT an increase in the "notes issued" of 80,940l., which is represented by a corresponding increase in the "coin and bullion" on the other side of the account. In the BANKING DEPARTMENT there is shown an increase in the "public deposits" of 425,862l., and in the "rest of 3582l., together 429,444l.; a decrease in the "other deposits" of 111,475l.; and in the "seven days and other bills" of 5320l., together 116,795l.—312,549l.; and adding thereto 174,901l., the decrease in the "other securities" on the asset side of the account, there is an increase in the total "reserve" of 487,550l.

Creditors of the Wynn Hall Coal Company (Limited) are required to send the particulars of their claims to the liquidators, at Wrexham, by Dec. 23—Jan. 26 being appointed by Vice-Chancellor Mallins for adjudicating upon them. The Stock Exchange Committee have this day ordered the shares of the Assheton Mining Company (Limited) to be quoted in the Official Lists.

**VAN UNITED.**—The operations at this mine are progressing as fast as possible. The lode in the engine-shaft still continues to be of the most promising character, with every probability of a rich deposit of ore being met with long before the 10 fathom level is reached. The level west, upon the line of the lode, is to be prosecuted with all practicable speed, where great discoveries of ore are sure to be opened up.

**OLD TREBURGETT SILVER AND LEAD MINE.**—The directors have purchased the powerful 60-in. steam-engine, boilers, pumps, and other materials sold at North Chiverton Mine on Tuesday. They will be forthwith erected at Old Treburgett; so that in the course of a few months the mine will be "forked," when returns may be expected from the silver ore left standing in the old workings.

**COMPRESSING FUEL, &c.**—Mr. WILLIAM JOHNSON, of The Elms, Sketty, Swansea, has invented some improvements in machinery for compressing the substances used for manufacturing fuel, and in moulding clay and other building materials, which consist of a double-acting steam cylinder placed horizontally on a firm bed. The piston rod, which projects both sides, carries at either end a plunger fitting and working accurately in a long bottomless tube, the upper side of which is made movable, and is so arranged that the outer or delivery aperture of the tube can be reduced or increased in size by the self-adjusting action of a lever weighted to any required pressure. Into this tube the material to be compressed, having been previously heated and mixed in a pug mill, is introduced through an aperture in the upper surface, each charge being compressed by the combined action of the plunger as it travels upward, and the frictional resistance of the compressed mass in the tube against which it has to be forced. Heretofore it has been found necessary in a press such as that described above to employ a series of division plates for the purpose of separating the charges, which without such plates would adhere to one another in one solid mass; or the compressed mass issuing from the tube has been cut into suitable sized blocks by knives. He has discovered a very simple and inexpensive mode of separating the compressed charges without the employment of either division plates or knives. The plunger is constructed with a water or air-tight compartment, into which a stream of cold water or cold air is introduced when the press is at work, passing in by one aperture and out through another. This not only keeps the face of the plunger cool, and therefore in a condition less liable to become clogged by the heated plastic material with which it is continually in contact; but it has the effect also of partially chilling the surface of the compressed mass in the tube against which the plunger has acted, so that the next charge coming against this partially chilled surface adheres to it with so slight a tenacity that the compressed mass when cool generally separates into blocks corresponding with the number of charges of which it is composed. To effect, however, an immediate and more complete separation of the several charges, a current of cold air is also introduced into the cavity in the pressing tube formed by the receding plunger, which acting upon the exposed surface of the compressed mass cools it effectually, creating at the

same time an atmospheric pressure in the cavity sufficient to prevent the next charge from adhering. When from defective construction of the tube it is difficult to obtain this atmospheric pressure the air is charged with finely powdered coal or other dust, which diffuses itself over the exposed surface of the compressed mass, and thus creates an effectual barrier between the charges. The mechanical arrangement required for the purpose consists of a short pipe or barrel fitted against the tube, and working in and out of the cavity by the action of the plunger, and at right angles with it. This pipe is closed at both ends, but is perforated with holes through which the air, steam, or water is discharged against the surface of the compressed material.

**Contract for Coals.**  
CONTRACT DEPARTMENT, ADMIRALTY, WHITEHALL, S.W.  
**TENDERS** will be RECEIVED on THURSDAY, the 2d December next, at Twelve o'clock at noon, for the following quantities of COALS, delivered ex ship at the undermentioned ports, viz:—

South Wales Coals.	North Country Hartley Coals.
Portsmouth ..... 500 tons	500 tons
Devonport ..... 1400 "	80 "
Gibraltar ..... 1100 "	1100 "
Jellah Coffee ..... 400 "	"
Sierra Leone ..... 400 "	"

To be shipped without delay.

Bermuda..... 500 tons	500 tons
Halifax ..... 1000 "	1000 "
Hong Kong ..... 1000 "	1000 "
Jamaica ..... 1000 "	1000 "
Malta ..... 3000 "	3000 "

To be shipped on demand, one month's notice being given.

Parties tendering must specify the description of Coals they propose to supply, as only the best qualities will be accepted.  
ANTONIO BRADY, Superintendent of Contracts.  
Contract Department, Admiralty, Whitehall, S.W., Nov. 23, 1869.

**TO SOUTH WALES COKE PROPRIETORS.**  
**WANTED**, by a Gentleman with a good connection in SOUTH STAFFORDSHIRE, the SOLE AGENCY for the SALE of COKE, either by salary or on commission.  
Apply to "K. P.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

**WANTED**, by a Young Man, a SITUATION as SURVEYOR.—Has a thorough knowledge of Land and Mineral Surveying, Mining Accounts, &c., and is a neat Draughtsman. Highest references as to character, abilities, &c.  
Address, "M. S.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

**WANTED**, a SITUATION, by an EXPERIENCED MINING and ENGINEERING SURVEYOR and DRAUGHTSMAN. References may be had on application to "J. D. K.," Messrs. Wadham and Turner, Engineers, Barrow-in-Furness.

**WANTED**, by an ESTABLISHED HOUSE in BIRMINGHAM, an AGENCY for the SALE of RAW and MANUFACTURED COPPER.  
Address, "Y. Z.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

**TO INVESTORS AND CAPITALISTS.**  
**THE ADVERTISER**, having had LONG EXPERIENCE in MINING, is in a POSITION to GIVE the NAMES of TWO MINES, almost safe to advance 100 per cent., one paying dividends, the other on the eve of so doing, 7½ per cent. out of profits.  
Address, "F. G. S.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

**TO PROMOTERS OF PUBLIC COMPANIES, &c.**  
**THE ADVERTISER** holds a VALUABLE TRACT OF MINERAL LAND, including MINES containing SEVENTY PER CENT. COPPER, and TEN PER CENT. GOLD. He wishes to MEET with RESPECTABLE PARTIES to FORM a COMPANY. The property is situated near a sea port, and a railway is just being completed in the district.  
For particulars, address, "South America," MINING JOURNAL Office, 26 Fleet-street, London, E.C.

**AN ESTABLISHED HOUSE in BIRMINGHAM** is willing to UNDERTAKE an AGENCY for the SALE of PIG IRON of a good brand in the town and district.  
Address, "A. B.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

**A GENTLEMAN**, periodically visiting the Tin and Iron Works and Collieries throughout South Wales, is DESIROUS of OBTAINING COMMISSIONS from FIRST-CLASS FIRMS in BRATTON CLOTH, PALM and LUBRICATING OILS, and GREASES. The very highest references can be given.  
Address, "A. B.," Post Office, Swansea.

**A GENTLEMAN**, having a valuable Concession from Government of an Undertaking in the Colonies, DESIRES to MEET with TWO or THREE GENTLEMEN, with three hundred pounds each, to join him in carrying it out. No agents.  
For an interview only, address "C. J.," 4, Little George-street, Westminster.

**A CERTAIN FORTUNE—PARTNERSHIP OPTIONAL.**—£5000, at 10 per cent., on good security, for two years. WANTED to ASSIST to COMPLETE the DEVELOPMENT of FIVE ADDITIONAL QUARRIES, on one of the most valuable slate properties in MERIONETH, held by long lease on liberal terms. The lender will have the option, after being paid principal and interest, to secure one-fourth share of profits for 73 years, guaranteed to amount to £3000 a year.  
Address, &c., "Q. E. D.," care of Mr. Watson, 15, Fenwick-street, Liverpool.

**LEAD MINE.**—A GENTLEMAN about to leave England is DESIROUS of DISPOSING of his INTEREST (£3000) in a VALUABLE LEAD PROPERTY, situated in WALES. The company is "limited," shares "fully paid up," and a great increase in value certain.  
Apply by letter to "A. B.," 120, Falmouth-road, Brompton, S.W.

**GREAT NORTH DOWNS MINE.**  
PRELIMINARY NOTICE.  
This EXTENSIVE and VALUABLE PROPERTY, with all the POWERFUL PUMPING MACHINERY and PLANT, and the ADVENTURERS' INTEREST in the SETT, will be OFFERED by PUBLIC AUCTION, in One Lot, as a going concern, early in December.  
Particulars will appear in the Mining Journal and Cornwall papers.  
For further information apply to the auctioneer, Mr. W. J. CLYMA, Truro; Capt. Rich, Scorrier, Cornwall; or to the secretary of the company, Mr. E. KING, 22, Austinfriars, London.

**TO BE SOLD.—THE LEASE of ELVAN GRANITE STONE QUARRIES**, situated in DEVONSHIRE, on most advantageous terms.  
Apply, by letter, to FRANCIS BUCKLAND, Esq., Solicitor, 13, Bedford-row, W.C.

**TO BE LET, ON LEASE**, for a term of years, SEVERAL ACRES of LAND, suitable for MANUFACTURING PURPOSES, advantageously situated on the south bank of the River Tyne, about two miles below Newcastle-on-Tyne, and within a quarter of a mile from the North-Eastern Railway. There is a good quay frontage, with deep water.  
Apply to Mr. T. S. BRAMWELL, King-street, Quay-side, Newcastle-on-Tyne.

**INVESTMENTS IN LEAD MINES.**—The DIVIDENDS paid by LEAD MINES for the year have DOUBLED in AMOUNT in the last ten years, and are likely to continue to increase. Some of the young lead mines will probably become profitable, and rise greatly in value in a short time. Full particulars, with a MAP of the Cardiganshire and Montgomeryshire districts (including Van, Dylife, Plynlimmon, East Darren, South Darren, Lisburne, Cwmystwith, Cefn Brynno, and other mines), can be obtained (price 1s.) on application to J. H. MURCHISON, Esq., No. 8, Austinfriars, London, E.C.

**THE EXCHEQUER GOLD AND SILVER MINING COMPANY (LIMITED).**

Incorporated under the Joint-Stock Companies Acts, 1862 and 1867, by which the liability of each shareholder is limited to the amount of his shares.  
Capital £60,000 sterling, in 60,000 shares of £1 each.  
Deposit 2s. 6d. per share on application, 2s. 6d. on allotment, and the balance by instalments of 2s. 6d. per share, at intervals of not less than two months thereafter, until paid up in full.  
DIRECTORS.—The Right Honourable the EARL POULETT—CHAIRMAN.  
The Right Honourable the EARL OF BUCHAN.  
The Right Honourable the LORD LOUTH.  
S. KING CHURCH, Esq.  
HENRY SYME, Esq.  
(With power to add to their number).  
SOLICITOR.—GEORGE ANNESLEY, Esq., 64, Lincoln's Inn-fields, W.C.  
BANKERS.—THE METROPOLITAN BANK (LIMITED), 75, Cornhill, London, E.C.  
BROKERS.—Messrs. BENTLEY and HALL, Angel-court, Throgmorton-street, London, E.C.  
MANAGER AT MINES.—Captain JOHN CHALMERS.  
SECRETARY.—HENRY MURRAY SCOTT, Esq.

If no allotment be made the deposit will be returned without any deduction. Applicants desirous of paying up their shares in full can do so, and will be allowed discount at the rate of 5 per cent. per annum upon the amount so paid in advance of calls.  
Prospectuses and forms of application for shares can be obtained on written application only to the Secretary, at the offices of the company, 112, Palmerston-buildings, Old Broad-street, London, E.C.

### Iron and Steel Institute.

**A GENERAL MEETING** will be HELD at the SOUTH KENSINGTON MUSEUM, on THURSDAY, December 2, commencing at Two o'clock P.M.:

PAPERS will be read by Mr. MENELAUS, "ON IMPROVEMENTS IN ROLLING RAILS;"—by Mr. BENSON, "ON THE GENERATION OF COMBUSTIBLE GASES UNDER PRESSURE;"—by Mr. THOMAS WHITEWELL, "ON A FIRE-BRICK HOT-BLAST STOVE."

The papers by Messrs. I. L. BELL and J. P. BUDD, read at Middlesborough, will be open for discussion. Each member can introduce a visitor. JNO. JONES, Secretary. Royal Exchange, Middlesborough, Nov. 23, 1869.

### King's College, London.

**THE PROFESSORSHIP OF GEOLOGY IS NOW VACANT.** For particulars, apply to—J. W. CUNNINGHAM, Secretary.

**MESSRS. J. HUME AND CO., 74, OLD BROAD STREET, LONDON, E.C.**

Closing prices.		Closing prices.	
East Caradon	£ 6 to 6½	Wheal Seton	£ 25 to £ 30
East Seton	35s. 40s.	Wheal Crebor	10s. 12s. 6d.
East Lovell	21 " 22	Great Wheal Vor	12½ " 13½
Prince of Wales	22s. 6d. 25s.	Brondoyd	5½ " 5¾
Hington Down	1½ " 1¾	West Chiverton	5½ " 5¾
West Maria & Fortes.	30s. 32s.	North Trekerby	12s. 13s.

The "Investment Record" free by post.  
EAST LOVELL.—Correct information and closest prices of shares supplied on application.  
All shares and stocks bought and sold at closest market prices.  
Bankers: The London Joint-Stock Bank.

**MR. H. WADDINGTON, 48, THREADNEEDLE STREET, LONDON.**

A fanaticism, which no experience ever modifies, has again carried EAST LOVELL from £14½ to £22, notwithstanding the strong evidences of its most uncertain nature—the 8 ft. of granite encroaching on the west from the east, and cutting out the tin; the diminished width of the deposit from 11 to 7 feet; the more concentrated nature of the deposit; the length now 12 ft. instead of 21 ft., as six weeks ago; and the fact that the eastern end of granite has not been cut down, lest it divulge the ugly fact that the end is too near, and which any practical man expects to hear of daily.  
Buying LOVELLS at £22 is buying crowns at a sovereign. On the south lodes scarcely trace of tin can be seen except in the bottom of the winze—Such is the "phantom."

**MR. J. H. COCK, STOCK AND MINING SHAREDEALER, 74, OLD BROAD STREET, LONDON, E.C.**  
Fifteen years' experience in Cornwall and London.  
Business transacted in all the leading mines, and those difficult of purchase or sale negotiated.  
SPECIAL BUSINESS in New Lovell, Ding Dong, Botallack, Hammett, North Trekerby, Levant, and St. Ives Consols.

**HOLMBUSH AND KELLY BRAY.—FOR SALE**  
TEN SHARES in this mine, at £3 5s. per share.  
Apply, by letter only, to "X. Y. Z.," 12, Sandringham-road, Dalston, London, E.

**TO COALMASTERS AND IRONMASTERS.**  
**TO BE SOLD, OR LET ON ROYALTY, the MINE of COAL** under about FIFTY ACRES of LAND adjoining a railway.  
For particulars, apply to Mr. G. DAVIDSON, Mawley, Clebury Mortimer, Salop.

**TO BE SOLD, the MANGANESE MINE** situate at MYNYDDNODOL, near BALA, NORTH WALES, with MACHINERY and TOOLS, sufficient to work from twenty to thirty men, comprising water-wheel, crusher, jiggers, long and square buddles, wagon and tram rails, kilns, picks, drills, &c.; blacksmiths' and joiners' shops, store-rooms, stable, manganese house, and manager's house, &c.—all nearly new, and in good working order. Price £1200.  
Apply to Mr. HARRIS, 6, Church-row, Bala, North Wales.

**MANGANESE ORE FOR SALE.**—Oxide of manganese, 64 per cent.  
For further particulars, apply to Mr. TH. THRMAN, in Stockholm, No. 4, St. Paulsgatan.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Nov. 14—Caldbeck Fells	203½	£13 1 6	Stock and Co.	
— ditto	32½	10 3 6	John Warwick.	
17—Plynlimmon	40	11 14 6	Walker, Parker, & Co.	
23—Trewetha	27½	21 2 6	Stock and Co.	
— Dylife	61	12 0 0	Walker, Parker, & Co.	
— ditto	28	11 8 6	ditto	
24—Frank Mills	85	15 18 6	Burry Port Company.	
— ditto	40	12 1 0	R. Mitchell and Son.	
— Stiperstone	50	12 9 0	Sims, Williams, & Co.	
— Llywernog	20	12 4 0	ditto	

Date.	Mine.	Tons.	Price per ton.	Purchasers.
Nov. 24—Stiperstones	30	£4 5 6	Bagillt Smelting Co.	

Date.	Mines.	Ts. c. q. lbs.	Price p. ton.	Amount.	Purchasers.
Nov. 3—Winalf Ury	9 14 1 22	£67 15 4	£600 6 1	—	Williams.
24—Penhalls	10 6 3 2	71 5 0	736 12 2	—	—
—Great Wh. Vor.	40 11 1 16	—	2850 3 9	—	—

Date.	Mine.	Tons.	Price per ton.	Purchasers.
Nov. 16—Caldbeck Fells	3¾	£17 14 6	J. Bibby, Sons, & Co.	
— ditto	10¾	9 3 0	ditto	

Sampled Nov. 10, and sold at Tabb's Hotel, Redruth, Nov. 25.					
Mines.	Tons.	Price.	Mines.	Tons.	Price.
Clifford Amalgamated	105	£4 12 6	Glasgow Caradon	55	£4 15 6
ditto	104	4 7 0	ditto	38	3 14 6
ditto	100	4 11 0	Phoenix	65	3 0 6
ditto	96	4 9 0	ditto	65	3 3 6
ditto	95	4 11 0	ditto	41	4 16 0
ditto	91	4 10 6	ditto	37	5 14 6
ditto	60	3 0 0	North Trekerby	72	5 0 6
ditto	59	3 0 0	ditto	72	5 4 6
ditto	47	2 4 6	ditto	62	4 10 6
ditto	45	1 13 6	Poldice	64	5 18 0
ditto	18	3 4 6	ditto	60	1 10 0
South Caradon	90	6 16 0	ditto	49	2 15 6
ditto	80	4 18 6	ditto	38	3 5 6
ditto	79	1 6 6	West Caradon	66	5 10 0
ditto	61	9 16 6	ditto	63	4 8 6
ditto	60	5 7 6	ditto	16	2 8 6
ditto	54	5 18 0	Craddock Moor	68	3 10 0
ditto	49	9 14 6	Wheal Rose	60	3 1 6
ditto	48	9 8 0	West's Ore	41	4 5 6
ditto	46	9 14 6	ditto	15	1 19 6
ditto	40	8 15 0	Tresavean	38	2 12 6
Glasgow Caradon	77	3 18 0	ditto	1	6 3 0
ditto	67	2 12 0	Wheal Eliza	9	4 0 0

TOTAL PRODUCE.					
Mines.	Tons.	Price.	Mines.	Tons.	Price.
Clifford Amalgam.	820	£3256 19 6	West Caradon	145	£680 11 6
South Caradon	607	4067 0 6	Craddock Moor	68	238 0 0
Glasgow Caradon	237	878 13 6	Wheal Rose	60	184 10 0
Phoenix	198	779 17 0	West's Ore	50	204 18 0
North Trekerby	198	983 7 6	Tresavean	39	105 18 0
Poldice	191	664 0 6	Wheal Eliza	9	36 0 0

Average standard.....£ 95 1 0 | Average produce.....7½  
Average price per ton .....£12 0  
Quantity of ore .....2628 tons | Quantity of fine copper.....203 tons 0 cwt.  
Amount of money.....£12,069 16 0  
LAST SALE.—Average standard.....£104 15 0—Average produce.....6½  
Standard of corresponding sale last month, £ 92 11 0—Produce, 8½.

COMPANIES BY WHOM THE ORES WERE PURCHASED.			
Names.	Tons.	Amount.	
Vivian and Sons	20¾	£187 3 3	
Freeman and Co.	134	504 1 6	
Grenfell and Sons	426	2182 5 6	
Sims, Williams, and Co.	237	994 10 6	
Williams, Foster, & Co.	408	2197 6 6	
Mason and Elkington			

### Notices to Correspondents.

• Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be fled on receipt: It then forms an accumulating useful work of reference.

**NICKEL AND COBALT.**—I would be glad to learn, through the Journal, where I could get nickel and cobalt ores in quantities, and at what price for nickel and cobalt per cent. I am advised that a large quantity of Hungarian ores are imported to this country, but I do not know who are the importers, or whether they come to Swansea, London, or Hull. If some of your correspondents could enlighten me on this point I would feel obliged.—M.M.: Liverpool.

Can any reader inform me how to coat glass with a thin film of silver, also of platinum?—A READER: Edinburgh, Nov. 24.

**NORTH TREKERRY.**—As this mine is likely at no distant day to resume its position in the Dividend List, may I be permitted to suggest to my fellow-shareholders the desirability of having at least an office of reference in London, so that those interested could readily obtain any information they might require?—A SHAREHOLDER.

The *Sirius* was the first English steamer which made a passage to New York, though she was very closely followed by the *Great Western*—the *Sirius* having arrived at New York on April 22, 1838, and the *Great Western* only 12 hours after her, on April 23. But neither the *Sirius* nor the *Great Western* took her departure from Liverpool, the *Sirius* having sailed from London on April 4, 1838, and the *Great Western* from Bristol on April 7. The first steamer which quitted Liverpool for New York was the *Royal William*, which sailed from Liverpool on July 5, 1838, and made her passage to New York in 19 days.

Several letters intended for this week's Journal are unavoidably postponed.

The Suez Canal has been exactly 16 years in course of construction. On Nov. 30, 1854, the Viceroy signed the document granting M. de Lesseps the right to excavate the canal. On June 13, 1855, the International Commission gave its assent. On Nov. 5, 1859, the subscription list was opened, and on the 25th of the same month (10 years ago) at but three days) the first sod was cut.

**MR. CHRISTOPHER BINKS.**—A letter is lying at our office for this gentleman.

**SHARE DEALING.**—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment. Tap-culstion, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

## THE MINING JOURNAL,

### Railway and Commercial Gazette.

LONDON, NOVEMBER 27, 1869.

#### VIOLATING COLLIERY RULES.

"Mr. LIONEL BROUGH, the Government Inspector, said all rules had been violated in the pit." These are the words with which a brief account is closed of what took place at the inquest upon the eleven deceased killed by the explosion at the Mackintosh Pit, Newbury, near Frome, Somersetshire. To this accident, it will be remembered, we adverted last week, when we wrote upon the necessity of strict discipline in our collieries as one of the means by which accidents can alone be diminished. We were, however, hardly prepared for so flagrant an illustration of the force of our remarks as this Frome case supplies. Because the case is still *sub judice*, we will not discuss the facts at this time. But it should be admonitory to not a few of our underground managers and workmen that the jury have sent for trial, on the charge of manslaughter, WM. BAKER, chief overman; ABRAHAM HAMBLIN, lampman; and JOHN BAYNTON, who "tore a division curtain."

At the Wakefield Court House, last Monday, two colliers were convicted of having used naked lights at the Victoria Colliery, Snydale, the property of Messrs. RHODES and DALBY. Both defendants were old colliers, and both continued the practice even after they had been warned by the deputy-viewer. The imposition of a fine of 12s. was light enough punishment for them. When will the colliers as a body be honest enough and wise enough to become their own police?

On the same day, at Tipton, in South Staffordshire, no fewer than four miners were convicted, also, of using naked lights in driving a gate-road to connect two parts of the pit, in a colliery belonging to the Darlaston Steel and Iron Company. They were all hurt, and their employers suffered loss to the extent of 200*l*. The personal injury which the men sustained, it may be well hoped, may prove an impressive warning to them at least. So the magistrates trusted, and therefore let them off with a mere nominal penalty imposed upon one of them. Will it be warning enough to others? The same magistrates next convicted a doggy of having had an insufficient supply of timber in a pit in the same locality. Because of this shortness of supply a working place had been incompletely propped, and a collier was killed by a fall of coal. The 20*s*. fine was light enough punishment.

In neither of these cases, happily, was there maliciousness. Whilst it is a threadbare truism that evil is wrought by want of thought as well as by design, still to compass disaster by premeditation becomes of all things most hateful. And such conduct is never more fiendish in its character than when it is premeditated in connection with colliery working. In such an industry very many men are thoroughly helpless to avert the danger to which they are exposed; and when overseers or employers are attempted to be "spited," men against whom no cause of quarrel exists are the chief sufferers. We are ashamed to have it to record of two men in any way connected with collieries that they should be even suspected of conduct of the class mentioned. Yet on Tuesday last, in the Wednesday Police Court, a colliery engineer and a bankman, in the service of the Patent Shaft and Axle-Tree Company, of Wednesday, were charged with having put a timber-wedge in the winding-drum barrel at a pit, by which its proper action was altogether reversed. The offence, upon the bankman's admission, was done by him at the instance of the engineer, who had been discharged from the working of the engine to which the drum belonged. Both men will be again brought up. Meanwhile let us trust that nowhere else can there be found amongst the hundreds of thousands of British mining operatives men whose conduct shall be such as to give rise even to a suspicion that they could be guilty of such flagrant wickedness. Instances enough are upon record which illustrate in an extraordinary degree the striking heroism of pitmen on behalf of imperilled fellow-labourers. These demonstrate that "the human heart can feel as warmly a thousand feet underground as in the most refined and cultivated circle of society." Perhaps it was because neither of the accused in the Wednesday case were accustomed to work underground, but only on the surface, that it was possible for the suspicion against them to be encouraged. Anyhow, we rejoice that the stigma of such a charge does not rest upon thoroughbred pitmen.

Nevertheless, some of the cases which have recently been noted only too unmistakably demonstrate that even these latter are sometimes forward to commit acts of insubordination which ought to be resolutely and involuntarily scouted the moment they suggest themselves to his mind. Next week we may have a few words to say upon certain phases of the question which relate to men somewhat higher in authority than those mentioned in the foregoing observations.

#### THE SOUTH WALES COAL BASIN, AND THE PARLIAMENTARY SESSION OF 1869-70.

We have lately frequently alluded to the scheme which has been propounded by some of the most eminent railway engineers, to connect the South Wales coal basin with the West of England, and also to provide more ready and easy communication with the metropolis. Since we last referred to the matter a step in advance has been taken, and one from which we augur that strenuous efforts will be made to give practical effect to such a vastly important project. The usual public notices have been given that it is intended to apply during the ensuing session for parliamentary sanction to the schemes. We have so fully explained the various plans proposed, and the routes of the intended branch lines, that we need not again do so; but it is a matter of sincere congratulation to find the whole of the South Wales district so fully alive to their interests, and the importance of the contemplated project, that probably the plans will come before the parliamentary committee under highly auspicious circumstances. The merchants of Bristol, of Gloucester, of Newport, and Cardiff, together with the directors and shareholders of the Great Western Railway Company, the Midland Company, and the North-Western Company have all considerable interests at stake, for upon

the ultimate issue of the contemplated works very much of their future prosperity depends. When alluding to this question upon a former occasion we threw out a suggestion that means should be adopted to ascertain the opinion of the most eminent engineers and practical men of the district in reference to the various schemes, and that once ascertained the whole weight and influence should be accorded the most highly-approved of plan. We are glad to find the suggestion we then made now endorsed by some of the principal local newspapers of the district. We repeat the suggestion, and believe it would be to the advantage of all parties if carried out. All have the same objects in view—the expansion of the coal trade of the South Wales district, and the securing the highly-prized minerals by more easy modes of transit into ports and districts now practically excluded. Why, then, should the supporters of the various plans (and each we know has its warm advocates and supporters) indulge in costly and vexatious litigation before the parliamentary committee, when the whole subject could be more amicably and easily settled by a committee of practical men representing each scheme. We sincerely hope our suggestion will be adopted. Parliament is not likely to sanction more than one scheme—possibly not the most advantageous; whereas the whole of the colliery-proprietors, iron-makers, and commercial community generally, giving a decided and emphatic approval of any one scheme, would carry such a moral weight and force that the parliamentary committee would not hesitate to give it parliamentary sanction.

#### GOLD AND SILVER MINING IN THE PACIFIC STATES.

The large and influential meeting held at the London Tavern on Thursday last, to inaugurate the formation of the PACIFIC MINING COMPANY, is one of the most important events that has occurred in the mining world for many years. The great metallic wealth of the States of California and Nevada is, of course, too obvious to need dwelling upon here; but hitherto, unfortunately, investments of English capital made in these States have turned out anything but prosperous. We need not discuss or dwell upon the reasons to which these failures may be attributed, or attempt to enquire into their causes. They belong to the past; and except as a lesson of caution for the future, the sooner they are forgotten the better. We have now entered on another stage. The mission undertaken by Mr. BATTERS, accompanied by Mr. SALMON, during the last autumn, has placed Californian and Nevada mining in a position which it has never before occupied in this country. There can be no better evidence of this than the meeting of Thursday, when the very *élite* of the City of London assembled to hear the interesting address delivered by Mr. BATTERS, which occupied the attention of his audience for nearly an hour and a half. That the statements made by Mr. BATTERS and Mr. SALMON, confirmed by the reports of Captain BARRATT on the special mining properties included in purchases of the PACIFIC MINING COMPANY, were deemed satisfactory by the gentlemen present, is but evidenced by the fact that, although no prospectus had been issued, or, indeed, no report or statement of any kind printed or circulated, the entire capital of the company (150,000*l*.) was applied for twice over before 4 o'clock—chiefly by the most influential members of the Stock Exchange.

This shows, what everyone acquainted with financial circles in England well knows, that it is not capital that is scarce in this country, but confidence that is wanted. The revelations of commercial fraud with which, week after week, we have been so nauseated for the last two years, have created a profound want of confidence in the public mind. It is a proud thing for Mr. BATTERS to be able to say that in this period of such general distrust and general stagnation he is able to stand up in the City of London, ask for, and in two or three hours receive, such support as he received on Thursday.

The PACIFIC MINING COMPANY is only one, and that not the largest, of the mining properties purchased by Mr. BATTERS's party. The EUREKA MINE has also been purchased for the sum of 250,000*l*., conditionally upon the consent of all the present partners being obtained. This great gold mine—one of the best in the world—is now paying about 75,000*l*. a year in profits; so that it is acquired at a price that will pay incoming shareholders 30 per cent. on their investments. Mr. SALMON, we believe, is of opinion that even with its present profits EUREKA is only in its infancy. It is scarcely 100 fms. deep, and in a couple of years may double the present profits. At the meeting, on Thursday, Mr. BATTERS almost promised that shareholders in the PACIFIC COMPANY should have a preference of allotment in the EUREKA.

#### MINING NOTES FROM NORTH WALES.

[FROM OUR OWN CORRESPONDENT.]

Mining operations in nearly all parts of North Wales are now being more actively carried out than for some considerable time past, and a very healthy tone is to be found pervading the various districts. In several places new works, or others which have been abandoned owing to the want of capital in efficiently carrying them out, and the absence of the best and most suitable machinery for economically raising the minerals, are being opened out, and in most instances with every appearance of success. English capitalists appear ready to take advantage of the opportunities offered for investing in *bona fide* concerns, and aiding in the development of others which only required the means, with good management, to become sources of no small profit to those connected with them. With the intention of noticing several of the leading coal and lead mines, and commencing with the former, we may congratulate the coal owners in the House of Commons on having a new ally to aid them in that branch of the Legislature, in the person of the Prime Minister himself. Such, however, is the case, Mr. GLADSTONE having last week purchased the Aston Hall estate, in the parish of Hawarden, and adjoining the property of his brother-in-law, Sir S. GLYNNE, Bart. The estate consists of 923 acres, with three collieries, the whole producing a rental of 2500*l*. per annum. The sum paid for the estate is said to be between 6,000*l*. and 70,000*l*. There are several good seams of coal running through the estate, and they are being worked by the Aston Hall Colliery Company, who also raise a good deal of capital clay, and for which they have erected large works for the manufacture of bricks, tiles, sanitary tubes, &c. At the colliery many thousands of pounds have been expended, but from which as yet the company have not received any appreciable return. They have, however, just commenced to draw coal from two new seams, a three-foot and a five-foot one. A good deal of machinery of the best and most approved description is being put down in connection, not only with the collieries, but with the clay works, and the prospects of the company are more cheering now than they have been.

The collieries in the neighbourhood of Queen's Ferry are now doing a moderate business. At the Prestatyn Company's Eleanor they have completed the top work, and are now getting the coal, a four-foot seam of good quality. The Messrs. THOMPSON are also raising a good deal of coal, and are sinking another shaft; they are also engaged in sinking below the present bed that is being worked, the colliers working during the day, and the slinkers at night, so that the work of the colliery is in no way interfered with. At the Little Mountain pits the trade appears to be good, the company having a rather extensive contract with the London and North-Western Railway Company, for locomotive coal for the Holyhead line. For some time past the Buckley Company have been making considerable alterations, so that the works are now in a very complete state, and in every way adapted for a very extensive business. The Loughton Mountain Company are now engaged in sinking to the main coal, and so far have proceeded very well in that direction, there having been little or no interruption to the work. Near to Mold the water appears to have broken into the workings of the Argood Colliery, for the removal of which a Cornish pumping engine is about to be put down, the foundation for which is now being laid. In the same neighbourhood the Coppas pits, in which a good deal of house, steam, and canal coal is raised, there is a rather fair trade—the oil works being now tolerably active, so requiring a larger quantity of coal than during the last half-year, at least.

There is now a good deal more activity at the Leeswood collieries, the serious disputes which prevailed in the district during the summer having now completely died out. Mr. YOUNG, the manager, whose assault by several of his men led to the riots in June last, and the shooting of five persons by the soldiery, has again resumed his old position, and the men and him agree better than they have yet done. As showing how great is the change that has taken place, it may be stated that one of the men who was sent to prison for a month for assaulting him is now one of his leading and most trusted hands. At Pentre Colliery the workings are being cleared, and they are laying out the roads, so that it is expected that the colliery will shortly be in full operation. The Bron-y-faia is now raising a good deal of coal, so that beside a good land sale a considerable tonnage is being sent to Birkenhead. In the same locality the Bromfield Company, having abandoned one of their pits, are now drawing all their coal out of the large pit, and are now rather busy. Such is also the case at the Oak Colliery. At the R. d. pits, near Flint, the Three Yard coal is being raised, and at the new Colleshill Colliery one shaft has been sunk to the coal. Near to Holywell there are a few collieries, most of which are now doing very well; amongst these the Englefield, which is working the main coal, is rather busy. Between Holywell and Rhyl are the Mostyn and Hanger Collieries, where the thickest seams of coal found in the country are worked, being nearly 15 ft. thick—a fact not generally known. At Mostyn there are two shafts, drawing nearly

the whole of the coal, it is understood, being got under the bed of the River Dee, where it appears the seams are thicker than they are found in the opposite direction. The pits make a good deal of water, for the removal of which a powerful engine, with a 100-inch cylinder, and 14-ft. stroke, is kept going, bringing out about 300 gallons a minute. There are two 18-inch lifts at the bottom, with a pair of plungers 24 in. in diameter above them. The depth of the shafts is about 250 yards. The same seam of coal is being sunk to at Battersfield Colliery, close to Bagillt, and by the banks of the River Dee. In connection with the collieries the chemical and oil works near to Paleswood, recently taken by Mr. TURNER, of Chester, and where a good deal of candle is used, are one more in full operation. At the Wapre works, in the same locality, and which were lately purchased by Mr. HILLS, of Lichfield, new furnaces have been put down, and there is every prospect of a very good business being done at them.

The Hawarden Iron Works, belonging to the Messrs. RADCLIFFE, are now actively engaged in the production of machinery boilers, and pumping apparatus for collieries and lead mines, and for the large slate quarries in Carnarvonshire. The works at Sandycroft are doing a rather moderate trade.

Holywell is the recognised centre and chief seat of the Flintshire lead mining interest. The principal mines in its vicinity are the Holywell Level, situated quite close to the town, and the Talargoch, nearer to Rhyl, at both of which a good business is being done. At the former they are sinking the shaft a few fathoms deeper, so as to get under the course of ore that is above, also sinking an engine-shaft, and putting down a wind-mill engine and crusher. The shaft of the South Merllyn Mine is being sunk deeper, until which time the work is stopped. The north and south lead is looking very kindly, and will turn out well, there is very little doubt. As has been the case for some time, the great Rhoemor is still standing, owing to the water, but is likely to be opened, as by driving the adit from the Deep Level Mine the water would be lowered about 30 fms. below the present bottom. At North Henblas an adit is being driven for the purpose of draining and ventilating the mine, and the prospects as to the future are encouraging. The Pantywe, a small mine, is looking tolerably well, and is said to be paying fairly. At Pryse Patrick they have found a new course of ore, which promises to last for some considerable time, whilst the Kilmore appears to be doing nothing. The Bedol-Aur (golden horse-shoe) Mine is doing but little, but the business at it is likely to increase, more ground having recently been taken. There has not been so much doing at Bryn Gwlog of late, the ore raised last month being only about 13 tons. Brynford Hall, a small concern, is raising about 5 tons per month, and at the Ebury Mine, at Halkin, they are now engaged in clearing the old workings, from which formerly a good deal of ore was obtained, although at present very little is being done in that respect. About a mile from Holywell is the Gladstone Mine, in which a good deal of calcium as well as lead is found.

A project, which is in a fair way of being successfully carried out, is now attracting attention in the Holywell district, being the formation of a company to take to the Celyn, the Orsedd, and the Merllyn Mines, and work them as one concern. This could be done without requiring engine-power, as the adit would be driven under the deepest part of one of the mines. The Orsedd, which was at one time a dividend-paying concern, is the centre mine of the three, and is about 70 yards deep, whilst there is a good lode at the bottom, and ready to be worked as soon as the water is removed. It is expected that the company will be completed this week, and a good many shares will be taken up by residents in the locality, as the project is highly thought of by several of the managers of other mines in the Holywell district, and who are well acquainted with the mines which are to be amalgamated. The Great Fron Fawngol Mine, it is understood, is to be amalgamated with the Summer Hill, and worked on the limit of liability principle, under the superintendence of Capt. W. WATLEY. The leases having been signed a few days since, it is expected that operations for opening out will be at once commenced.

At the Maes-y-Safn Mine, Mr. Cooper, of Hawarden, is now putting down a new ore-washing machine, on the tilt principle, but of rather novel construction, and the right to which has been secured by being registered. It is attracting some attention amongst the mining community, and should it answer, no doubt it will come into pretty general use. At the sale of the materials of the Westminster Mine, situated between Mold and Holywell, Capt. MITCHELL was the purchaser of the large engine, and it is generally believed that a company will be formed to work the mine on the Limited Liability Principle. Before taking leave of Flintshire, it may be stated that the Holywell Tin-Plate Company are putting down a 35-horse power engine, and a 12-in. boiler, which will be connected to a powerful turbine, the works being enlarged to meet the requirements of an increasing trade.

At Llanddona, near Beaumaris, a new mine is about to be opened, the "tack-note" having been given to Mr. ROBERTS, of Flint, and some others. The vein has been traced not far from the surface, and the promoters are very sanguine that the venture will be highly profitable indeed. At Llannwchyllin, near Bala, a very rich vein of manganese has been discovered, and from which it is expected upwards of 100 tons of ore will be raised annually. Taken altogether, the mining prospects in the northern part of the Principality are in every way encouraging, and the success which has attended the opening out of several concerns, which had been closed for various reasons, will give greater confidence to the capitalists, as there are few speculations which pay so well as those in mines. In proof of this we need only look to the recently opened old Cat-Hole, or Mold Mines, where already, although the new machinery has as yet scarcely got set, a good deal of ore has been raised, and the shares advanced to a considerable premium. There is yet plenty of ground untouched, so that for some time to come, now that the tide has set in, we may look for new works being opened, and which with judicious management, and capital cannot fail to be remunerative, the great drawback to many really good concerns which have hitherto failed being the want of the necessary funds for providing the most efficient machinery, which in the long run is the true and only economy.

**ECONOMIC IRON MANUFACTURE—LURMAN'S HEARTH.**—The excellent results obtained by Messrs. Fletcher, Solly, and Urwick, of the Willenhall Furnaces, by the use of the improved hearth, invented by Mr. Lurman, were referred to in the Supplement of the *Mining Journal* of Nov. 6, and it is gratifying to learn that the furnace continues to work most satisfactorily, the make of iron gradually increasing in quantity. The furnace fitted with the patent closed hearth is 14 ft. between boshes, and is supplied with the blast through six bronze tuyeres. It has Addenbrooke's arrangement for taking off the gas, and is, in fact, a well-constructed furnace in all respects. In a carefully-conducted trial with and without the improved hearth—similar ironstone and equal quantities of fuel being used—it was found that 38 cwt. (against 33 cwt.) of ironstone were smelted when the new hearth was used, the difference being equal to an economy exceeding 15 per cent. Even this result has since been surpassed, but further comparative trials have not been made.

**THE CHANNEL RAILWAY BRIDGE.**—Although the merits of Mr. BOUTER's system of bridge building has been thoroughly recognised in France, comparatively few engineers in this country appear to understand its many advantages, and its thorough adaptability to the purpose intended. It is probable, however, that the BOUTER bridge will now receive the attention it deserves, the remarks of Lord HENRY LENNOX, in his inaugural address at the Society of Arts at the opening of the new session, being most encouraging. He said—

"There are several projects for a tunnel under the sea, and as one of these schemes is to be unfurled in a fortnight's time, I will say nothing about it to night. Then there are the schemes for a new bridge across the Channel, one especially that has attracted great attention in Paris, and is reported to be favourably looked upon by the EMPEROR OF THE FRENCH. The designs for this Channel Bridge are the work of Mr. BOUTER, and have, I believe, been already discussed by the Society of Engineers; and my impression is, that this is the best scheme for a bridge over the Channel that has been proposed. There is in Paris a model on a large scale, which bore ten times the weight which would require to be borne by the Channel Bridge, constructed with less than 1 ton of metal, and resting on two abutments of rough timber, which were incapable of sustaining a very great strain. Mr. BOUTER was kind enough to send me his drawings to me at length, and even if the Channel Bridge were not attempted his plan of building bridges is capable of such astonishing results as to make it well worthy the study of our own engineers."

Now, as the President of the Society of Arts Council is neither an incompetent authority on engineering matters, nor one likely to speak so favourably of a project without ample previous investigation, his observations may fairly be placed amongst the most important evidences in favour of Mr. BOUTER's system which have been brought forward on this side of the Channel.

**A NEW CANAL PROJECT.**—Following the acknowledged success of the Suez Canal, a home project is now before the public, under the name of "The Great Western Maritime Ship Canal," extending from Bridgwater Bay to the estuary of the Exe, so as to open a new and improved communication between the great South Wales coal fields and adjacent districts, and the western and southern counties, London, and the Continent, and thus reducing the sea passage by about 200 miles. Besides the reductions in distance and time there would be a saving of danger, the voyage round the coast of Cornwall and the Land's End involving great risks. It is confidently assumed that the cost of the canal, including harbour and dock works, will be under 3,500,000*l*.; the canal being 59 miles in length, 124 ft. wide at the surface, 31 ft. at the bottom, and 21 ft. deep. A port accessible to the largest vessels at all states of the tide will be established on the coast of Devonshire, such as does not at present exist from Portland to Plymouth. It is estimated that tolls levied at the rate of 4*d*. per ton per mile on coal alone will produce a profit of nearly 5 per cent. on the outlay. The quantity of coals that it is expected will pass through the canal annually is 4,261,334 tons, and if to this is added the tonnage of coke, iron, and other mineral and miscellaneous products, it would seem that there is a chance of a very large revenue. One of the advantages which it is supposed will result from the construction of the canal will consist in the supply of cheap coal to the southern and western counties, and to the metropolis; the produce of the Welsh and neighbouring collieries being, in the opinion of competent judges, not inferior to North Country coal, and would be in equal demand were it not for the absence of direct means of transport. We believe that a somewhat similar enterprise was brought out so far back as the year 1825, under the auspices of the celebrated

engineer, TELFORD, and for which an Act was then obtained. The present project is, we understand, exciting considerable interest in South Wales and the adjoining localities; and no doubt, if it could be carried out, it would prove very advantageous to the mercantile community, and would be a work of great general utility. The development of the mineral resources of South Wales is of much more importance now than when the Act referred to was passed, and is of itself a sufficient reason for again directing attention to the subject.

#### MINING IN THE ISLE OF MAN.

That there are valuable deposits of lead in nearly all parts of the Isle of Man is fully believed by those acquainted with the geology of the island; but there appears to be some difficulty in obtaining "takes" to work, the minerals being the property of the Crown. Hence there are not those opportunities of developing the valuable minerals abounding in the Isle of Man which are to be found in other mining districts, where it is to the interest of the owner to afford every facility for raising the ore which is to be found on his estate. With all those difficulties, however, a new mine is now being opened out at Douglas Head, and there is the most undoubted evidence of its turning out highly successful. It appears that some time since permission was obtained to open out a mine, but at such a distance that it could not be seen from Douglas, lest it should interfere with the interests of that place, by becoming an eyesore to the visitors. Accordingly an adit level was driven about 90 fathoms, at a point sufficiently far from Douglas. With regard to that level, which was driven on a cross lode, nothing was done. After a considerable interval application was made to the Woods and Forests, and leave was recently given to open out anywhere on the take granted in the first instance. Such being the case, they are now sinking a shaft in a very favourable situation, and where there is a very promising lode, the gossan which was shown to us by Mr. Smedley, of Holywell, who is the largest shareholder in the company, giving every indication of there being a valuable deposit of lead underneath it.

With regard to the situation of Douglas for mining operations, it may be said that in extending the harbour and making foundations for the erection of buildings a good deal of lead was got, and, no doubt, from the same vein the company alluded to are sinking to. A small engine is about to be put down for getting the water out, and for which pumps are being prepared. Sinking will shortly be resumed, and it is expected that the vein will be reached at a depth of considerably less than 100 yards. The sinkers have got down about 18 yards, and the stratum gone through has been found similar to that of the Laxey Mine, which is about the most valuable in the kingdom. It is also worthy of notice that the lead mines in the Isle of Man are the richest of any in the kingdom in silver, averaging upwards of 42 ozs. to the ton of lead ore. With these facts in view, there is very little doubt but what the Douglas Head Mining Company will become a successful one, and the shareholders rewarded for the patience they have exhibited under most untoward circumstances, as well as for the energy they have shown in pushing forward the work of sinking when they were placed in a position to do so advantageously. It is, therefore, more than likely that if similar facilities are granted to other persons as to the company named that the valuable minerals to be found in the Isle of Man will be ere long developed to an extent that has not been anticipated even by those most interested in mining operations.

#### ATMOSPHERIC GAS.

The convenience which would undoubtedly result in almost innumerable interests from the possession of an apparatus by which illuminating gas can be produced as required has long been acknowledged, and an invention is described in *La Houille* which promises to meet all the requirements of the most fastidious. The atmospheric gas is produced by a current of air impregnated with the volatile spirits of petroleum, according to the invention of Messrs. Rouillé and Co., of Paris, and the experiments which have been made at the Rue Lafayette have proved most satisfactory. In order to saturate the air sufficiently with hydro-carburetted vapour, it is essential to multiply as far as possible the points of contact with the spirit; Messrs. Rouillé and Co., therefore, conduct it into two saturators, which contain carded wool wetted with the spirit. But as at the ordinary temperature the spirit is not volatile enough to saturate the air completely, or give a sufficiently rich gas, Messrs. Rouillé and Co. have an ingenious arrangement, which not only accomplishes the object in view, but at the same time prevents any inconvenience that would arise from the incomplete volatilisation of the liquid, leading to settlements of deposit, which would interfere with the operation of the apparatus.

It appears that at each trial of the apparatus the results obtained are more complete, probably owing to the exact mode of working, the machine being more completely understood; and perhaps the greatest recommendation of the machine is its extreme cheapness—a five-light apparatus being supplied for less than 10*l.*, and the price for larger sizes certainly does not increase in proportion, for a 10-burner machine costs but 16*l.*, 25-burner 24*l.*, and so on in proportion. Messrs. Rouillé's apparatus is already employed in several warehouses in Paris, and on the Western of France Railway, and there can be no question that many of our country railway stations which are at present illumined by dingy oil-lamps would be vastly improved by the adoption of such an invention as that of Messrs. Rouillé. It is understood that the necessary steps will be taken for bringing the invention under the notice of the British public, by the formation of an influential joint-stock company; and, judging from the results already achieved, no doubt need be entertained that the commercial result of such an enterprise will be such as to thoroughly satisfy the capitalists who may connect themselves with it.

**AUSTRALIAN COAL.**—A discovery of some importance appears to have been made in New South Wales, a new coal mine having been opened up in the district of Hartley, at a place known as Brown's Gap. The coal was discovered cropping out on the surface, on the south side of a mountain, about 200 ft. from its base, and a drive was opened which soon presented a seam 11 ft. in thickness, without fault or band. It is stated that the coal can be brought to Sydney at a price which will enable it to compete favourably with Newcastle (colonial) coal. This discovery promises to be of considerable importance in connection with the development of railways in New South Wales. Thus, the new coal has been tested by Mr. Buller, on the Great Southern and Western Railway of New South Wales. Mr. Buller is locomotive superintendent of the line in question, and has had railway experience in England as well as in Australia; his report on the new coal was of a favourable character.

**AUSTRALASIAN GOLD.**—A company has been formed, under the title of the Wairarapa Pioneer Prospecting Company, for the purpose of prospecting quartz reefs known to exist in the neighbourhood of the Wairarapa, New Zealand. A gold prospecting party sent up the Wanganui River, under the command of Capt. McDonnell, has reported the discovery of gold, and some specimens have since been brought into Wanganui. Gold is believed to exist in paying quantities at Terawiti, New Zealand; 7 ozs. of beautiful nuggety gold were obtained by Mr. Wright, of Ohio, as the result of 15 days' work. At the last dates the Taranaki (New Zealand) Prospecting Company (Limited) was in course of formation. The capital is 500*l.*, in 100 shares of 5*l.* each. Attention is being directed to rich quartz reefs known to exist at Moonlight, New Zealand. Several rich nuggets have been obtained from Moonlight Creek; one of them, slightly impregnated with quartz, weighed 37 ozs. The gold was of a splendid colour, and much like that met with in the Kingover and Mount Lorong districts, Victoria. It was found by a digger named McCloskie. The Moonlight Creek diggings, it should be added, are in the province of Nelson. Prospecting has been proceeding of late upon Stewart's Island, New Zealand, but at present the results obtained can scarcely be said to be very satisfactory or conclusive.

The yield of gold in Victoria for the first half of this year is estimated to be about 100,000 ozs. short of the quantity obtained in the corresponding six months of 1868. In May and June, however, the yield was again increasing. The Ballarat alluvial mines still occupy the foremost place; as regards the quartz workings, those nearest Melbourne have presented the largest average yields.

The total number of miners employed on the gold fields of Victoria at the close of June was estimated at 9890. A "rush" of considerable promise occurred in September in the parish of Kirkella, Victoria, in consequence of the discovery of two rich reefs—one called the Germania Reef, situated about one mile north-westward from the Bonnie Dundee Company's leased ground; and the other called the West Germania Reef, situated about 1 mile further to the north-west than the first.

#### TRADE OF THE TYNE AND WEAR.

Nov. 25.—With the arrival of the large fleet at the latter part of last week an impetus has been given to the local trades. In the Tyne the number of arrivals since the cessation of adverse winds are estimated at 700, 250 of which were from abroad. The river is now full of ships, and trade has been very active during the week, and freights have gone down to 6*s.* per ton for London. There is a considerable demand for the Channel ports, at good rates. In the Wear there have also been large arrivals, and the rate to London has fallen to 6*s.* 6*d.* per ton. The demand for sailing ships is, however, rather limited, owing to the collieries being pretty well supplied with steam-ships. At the Hartlepool an agreeable change has taken place. The docks and harbour are now pretty well filled, nearly 400 vessels having arrived since last week. The sailings have been 97, 87 of which have taken cargoes of coal. As might be expected from the large arrivals, freights have receded considerably.

The Iron Trade continues to improve, almost the only slackness to note being in engine making, this branch of trade continuing remarkably dull as a rule; of course, a large stock of engines of all kinds accumulated during the long depression, and some time must elapse before this stock can be got rid of. Most other branches of the iron manufacture are at present well employed. Pig makers are very busy, and prices are improving. There is a good demand for rolled iron, ship, and angle-iron, &c., and most of the rolling-mills of the district are well employed, and also the general iron works and foundries. The erection of the works at Dunston, where new rolling-mills, &c., are to be started, are now being pushed vigorously forward, and certainly a better position can hardly be conceived, as all the necessary materials are to be had either by land or water at a cheap rate. With respect to coal, it is to be had in abundance, and at as cheap a rate as at any point in the kingdom, and pig-iron can be had from any point by rail and water also—that is, the pigs of Cleveland, Ridsdale, and Whitehaven, so that iron of any quality required can be produced. And the same remark applies to the transit of the finished iron produced at these works, as either for home consumption or export every facility can be found.

The subject of the amalgamation of the branch colliery line of Earl Vane, extending from his extensive collieries to Seaham and to Sunderland, with the North-Eastern Railway system, has often been discussed, and is now again agitated. The present arrangements are extremely inconvenient, and often cause loss to both parties; many serious disputes have indeed arisen respecting the delivery of coals at the docks at Sunderland, and other arrangements of business in which both companies are concerned. It must also be recollected that the port of Seaham is not at all adapted for large vessels, and even for vessels of moderate size it is only suitable for fine weather; as a proof of this, during the late prevalence of rough weather, the collieries of the firm were almost brought to a standstill. If an agreement could be arrived at, which, it is almost certain, will be done, by which the traffic from the extensive works of Earl Vane would get access to the North-Eastern Railway and the various docks and harbours in connection therewith, at reasonable rates, a great advantage would be gained by both parties, as the railway company would get an increased traffic, and the coal company would get the means of conducting their business in a regular and systematic manner.

The very interesting paper read by Mr. Peacock before the Cleveland Literary and Philosophical Society, "On the New Red Sandstone of Cleveland, and the Rock Salt found in it" (published in the Supplement to last week's Journal) contains many points of special interest to the miner and to the geologist, and is also most interesting to the public and commercial men generally. The discovery of a vast bed of salt in these measures at Middlesbrough, which is shortly to be worked, is an event of much importance in a commercial point of view, and eventually it will prove a great addition to the mineral wealth of the North of England. This is shown in the paper alluded to, as Cheshire salt costs 7*s.* per ton for land or sea transit to the Tyne, and Middlesbrough salt will only cost 2*s.* per ton. A large home, and also export trade, is, therefore, open for salt at this point. The great thickness of the Trias, or New Red Sandstone, at Middlesbrough, is a most remarkable circumstance; and, although the salt has been reached by boring, yet the coal beds, if they do underlie this curious formation, must be pronounced inaccessible at this point. Mr. Peacock estimates the total thickness of sandstone here at 2306 ft.—that is the lowest calculation, but it will probably prove to be more, and there will be 3000 ft., including the magnesian limestone; therefore, presuming that the coal measures underlie those formations, the depth of the coals will prove enormous. But a most important question, which requires to be solved, is this—whether the Durham and Yorkshire coal fields are true and independent basins, or only parts of one coal formation? Should the latter prove true, no doubt points would be found where the Red Sandstone thins out in Cleveland, and the coals would, consequently, be accessible. The most eminent geologists are at present of opinion that these coal fields are true and independent basins, but really this question is yet to be solved, and the existence or otherwise of the coal measures under this New Red Sandstone is one of the greatest importance in connection with the future prosperity and progress of Cleveland.

**SMOKE PREVENTION.**—The Mayor of South Shields (Ald. Strachan) accompanied by Mr. R. Robson, Inspector of nuisances, and Mr. Oldroyd, partner with Mr. Kendall, engineer, witnessed the trial of a furnace for the prevention of smoke in boiler furnaces, invented by Mr. Kendall, engineer, at the Percy Main works of the Blyth and Tyne Railway Company. The system consists in making the front of the furnace in the form of perpendicular grating, and placing inside, at a short distance from the grating, a solid plate of iron reaching to within 2 or 3 in. of the furnace bars. So complete a combustion was caused that a live fire ensued, and little or no smoke was emitted. The furnace which the trial took place is one in connection with the Tyne Plate Glass Works.

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Nov. 25.—We are now rapidly approaching Christmas, ice is floating about the mouth of the Neva, and, therefore, shipping for the Baltic is over for the season; and yet the demand for iron continues good, and there seems to be, on the whole, fair grounds for anticipating that the advance of prices, made rather hastily, may be justified by the demand, which seems to be increasing rather than diminishing. Of course, the present aspect of trade may be changed by many adverse circumstances. An advance in the import duties in the United States, or a war between Turkey and Egypt, or between Austria and Russia, arising out of the petty insurrection in Dalmatia, might cause a complete turn of the tide, but so far there seems no reason to apprehend either of these misfortunes. The demand for an advance of wages by the Amalgamated Miners' Association of Lancashire, Cheshire, and North Wales is the natural result of recent advances in Staffordshire, where, however, the men insist they are entitled to a further rise, but are willing to accept instead a reduction of the hours of work.

There has been a difficulty between two classes of ironworkers at Earl Granville's works, in the Staffordshire Potteries. The underhand puddlers considered that when those under whom they work got an advance of 1*s.* per ton they were entitled to a corresponding rise of 3*d.* per ton. The upper-hands refused this, on the ground that when a reduction took place nearly two years ago, of the same amount as the recent advance, the wages of the under-hands were not altered. The latter ceased work, assembled in a riotous manner, and some stones were thrown. Of course, this afforded an opening for the interference of the police, who soon quelled the disturbance, and took measures to prevent a recurrence. Since then, however, the under-hands have gradually gone to work again. Should trade continue good some of the under-hands may get promoted.

Powers are to be sought in the approaching session of Parliament for laying down tramways, or street-railways, in Birmingham and in

a number of places in South Staffordshire, no less than 14 distinct lines being named in the parliamentary notice. Probably this is the most extensive scheme yet practically proposed for the adoption of these tramways, and perhaps it would be difficult to find a district offering better prospects of success for such an enterprise than South Staffordshire, where a number of populous places are scattered over a considerable district, the traffic between which is large and constant. There is, however, the competition of railways, which are numerous in the district.

#### REPORT FROM SCOTLAND.

Nov. 24.—The shipments of Pig-Iron from the Scotch ports for the week are large, being 12,160 tons, against the lesser total of 6260 tons in the corresponding week last year, with a large consumptive and speculative demand operating on the market. Prices, consequently, keep firm, even while advancing, and are remunerating makers after the depression of Midsummer. The closing quotations of last week were 54*s.* 6*d.* cash, and 54*s.* 9*d.* one month. On Monday the market opened firm, at 1*d.* advance, which was afterwards increased, and closed with sellers at 54*s.* 9*d.* cash, and 55*s.* one month, buyers offering 1*d.* per ton less. Yesterday the market was rather easier, and closed at 54*s.* 8*d.* cash, and 54*s.* 10*d.* one month, sellers wanting a fraction more. To-day the market was better, and about 6000 tons sold at 54*s.* 9*d.* and 54*s.* 10*d.* cash, and 55*s.* and 55*s.* 1*d.* one month, closing sellers a shade higher. No. 1, g.m.b., 54*s.* 6*d.*; No. 3, 53*s.* 6*d.*; Gartsherrie, 62*s.* 6*d.*; Coltness, 62*s.*; Summerlee, 60*s.*; Langloan, 58*s.*; Eglinton (at Ardrossan), 55*s.*; makers' iron quoted all No. 1. The total shipments of pig-iron from all the Scotch ports from Dec. 25, 1868, till date, were 585,102 tons, being an increase of 59,120 tons over the same period of last year, and the decrease in the imports of Middlesbrough pigs in the same period was 48,750 tons, which, when subtracted from the former increase, leaves an improvement of 10,370 tons on the trade of the year till date. The Finished Iron Trade is, perhaps, more full of life and hope than it has been for a couple of years, and the specifications embrace iron for very varied purposes. Our makers who can take rails can have any amount, and bars, rods, flats, and half-flats, angle, nailrod, plates, and other descriptions of malleable iron are all in specification, and buyers are offering more money, but short of the quotations noted last week, which is the scale price. As soon as suitable weather returns the Clyde shipyards will be busy down both sides of the river, from Rutherglen Bridge to the Tail-of-the-Bank, out from Greenock.

We regret to learn that private advices received here from Russia give rather a gloomy account of commercial affairs in that empire, and indicate that a system of over trading has been carried on for so long a period that a financial and commercial crisis is impending. Remittances for rails and other goods sent hence, and now over due, are not being made; and it is feared, we hope without foundation, that the iron trade in the North of England, and especially in Wales, may be sufferers. We hope present advices will not be realised.

The Coal Trade, so far as enquiries are concerned, has greatly improved, and lines for 5000 tons for shipment are bringing back former times. House coal has been advanced from 6*d.* to 1*s.* per 24 cwt., but shipping qualities remain as before quoted, with hopes of an almost immediate advance, if the tide which has set in continues. During the week the return of coals shipped was 21,195 tons, against 21,960 tons in the same week last year. There seems to be a scarcity of coal at many foreign ports, and it is expected that the demand which is manifesting itself will continue, and a period of prosperity and high prices will follow.

Mr. Alexander Macdonald is expected home presently from his second tour through the United States. Another report says he is engaged for an agitation tour through the mineral States of the Union.

The colliers in the Glasgow district, who were about to strike for an advance of 6*d.* per day, to make them equal to their brethren in the Wishaw district, have received the offer of the advance from the 10th proximo, by Mr. Buchanan, of Eastfield, and if during the first fortnight thereafter the colliers do not succeed in receiving the advance generally Mr. Buchanan will revert to the wage presently paid. In the meantime complaints are being made that while the miners on the Belhaven estate (Wishaw district) have received the advance from the 10th inst., there is a likelihood that they may lose it, on account of the men on the Coltness estate not holding on for the increase. With the present prospects there is more likelihood of miners' wages advancing than retrograding.

The unexpected death of Dr. Penny, Professor of Chemistry in the Andersonian University, will enable Mr. John Young to renew his munificent offer to found and endow a chair of Technological Chemistry in that University, which will prove an undoubted boon to the citizens.

At the ensuing meeting of the Philosophical Society of Glasgow, the question of "Patents" will form the subject of discussion. Mr. St. John Vincent Day, patent agent, will introduce the subject, which may be continued over several meetings, as some Members of Parliament have been asked to join in the discussion; and we understand that Mr. Macfie—who has a notice on the subject before the House of Commons—has promised to be present.

#### REPORT FROM MONMOUTH AND SOUTH WALES.

Nov. 25.—The dissatisfaction which was created by the course taken by the makers in Staffordshire in rising the price of iron to such an extent, together with the fears which have arisen with respect to the efforts which it is said are being made to render the American tariff in iron more protective, have caused a sort of lull in the iron trade, especially as far as engagements in other branches of the business than rails are to be considered; and, perhaps, but for the fact that manufacturers have had their books pretty well filled with engagements that will keep their works in steady employment for several months, the effect of the decision of the Staffordshire makers would, in all probability, be much more seriously felt in this district. In the meantime, however, the decision of the Staffordshire makers cannot materially affect the position of the trade here, for the reason just given, but the dissatisfaction respecting it still exists among the makers, notwithstanding their hope that it will not affect them on any future occasion. With respect to the tariff question, it is strongly hoped, and by many urged, that there is no real reason to apprehend that the efforts alluded to will be attended with success. Buyers, however, are somewhat disposed to defer transactions, as the end of the year is so nearly approaching.

As was noticed above, the principal works are still steadily employed in working out the rail orders which have been some time in the books; and a brisk business continues to be done between makers and the American and continental houses mentioned in last week's report. There is a good offer now in the markets for 10,000 tons of rails, together with a proportionate quantity of cast-iron sleepers for an Indian Railway Company, and it is expected that the rail part of the order will be secured for this district. Home business is but little improved. Bars remain dull, but for pig-iron there is a slightly better enquiry. Iron suitable for shipbuilding continues in better request. In several of the leading works operations are now being extended, which may be taken as indicative that the position of the trade is by no means less hopeful, and renders it still less probable that there will be no lack of employment for the winter months.

Although it cannot be said that there is any organised movement among the iron-workers of South Wales to secure an advance in wages, yet there is no doubt as to there being a wide-spread feeling among the hands that they are, or at least will be in the course of a few weeks, fairly entitled to a rise in the rate of wages. The principal make of the district is railway iron, and the men allege that, as compared with two years ago, there is an advance of 20 per cent. on the prices then obtained, and that, therefore, they are not forming unreasonable expectations when they consider that they ought to be awarded one-half the rise—10 per cent. On the other hand, employers state, and, undoubtedly, with ample foundation for their allegations, that for a period of four years the iron trade was in a more depressed state than ever known before, and that many establishments were carried on at heavy yearly losses. These losses, they contend, ought to be fully recouped before the workmen can fairly demand a rise, for unless capitalists can secure an average reasonable return upon their investments, how can it be expected that they will

lay out their money in iron works? They do not, however, desire to enforce this rule too rigidly, but are quite prepared, as soon as circumstances will permit, to grant an advance. The men must not be too precipitate, and must have a little patience, for they know little of the serious financial difficulties that their employers have often to contend with. If the present good demand for rails continues, of which there is every probability, the men may safely look forward to a rise as soon as the old contracts are worked out. Already the Patent Nut and Bolt Company (Limited), and Messrs. Hill and Co. Cwmbran, have intimated that they will advance wages 10 per cent. in a month's time, but both establishments are special branches of the iron trade, quite distinct from the great rail-making establishments of the district, and, therefore, cannot be pointed to as examples that ought to be followed by the trade generally. In the Tin-Plate Trade there is yet no change from the dulness reported last week.

There continues to be some sign of improvement in the Steam Coal Trade, and proprietors maintain a steady business with the majority of the foreign markets. There are also slightly better enquiries for house qualities.

A large quantity of Aberdare steam coal continues to be forwarded to Pembroke Dock for the use of the Navy, and it is rumoured that early next year the Channel fleet will again be sent to Milford to coal. This is the result of the trial made a short time since, when the vessels of the fleet were coaled at Milford with the most satisfactory results, both as to the price of the fuel and the quality of the coal supplied.

The inquest on the bodies of the men who were killed by the explosion at the Hendreorgan Colliery, the property of the Hendreorgan Coal Company, was closed on Wednesday. Several witnesses have been examined since the opening of the inquest, and it would appear that the explosion was caused by the firing of gas, which had escaped from the roof where a fall had occurred. The ventilation of the workings was pronounced satisfactory, but some of the air-ways were found to be obstructed. The jury, after some deliberation, returned the following verdict:—That the deceased met their deaths accidentally consequent upon an explosion of after-damp, the consequence of an explosion of fire-damp.

In the case which was brought forward some time ago at the Merthyr Police Court, by Mr. Joseph Ewing, Inspector of Factories, in which the Downla Iron Company were summoned for employing two boys under 13 years of age in the iron works during the night, Mr. J. G. Fowler, stipendiary magistrate, gave his decision. The case was instituted with a view to clear up a disputed point in the Act, as to whether boys under 13 and over 12 years of age may or not be employed in the iron works during the night up to 1870. After referring to a series of statutes, beginning with William IV., and ending with the 18th Vic., Mr. Fowler said he was satisfied that the modifications contained in the last Act did not sanction the employment of boys under 13 by night. He, therefore, decided accordingly, but as the question was brought forward rather to obtain an opinion on a doubtful point than to enforce penalties, he should not impose more than the nominal penalty of 40s.

At the Hirwain Coal and Iron Company (Limited) meeting the report of the directors, which was given last week, was adopted. The Chairman, Mr. Handel Cosham, wished to console the shareholders on the losses which they had sustained, as was shown by the report of the directors, by stating that he believed there was a very hopeful future for them. With regard to the iron works which they had formerly possessed, he said arrangements had been entered into by which they would get a royalty on all the iron made, and that would bring them in an amount considerably more than they had paid for the iron works, and give them, in addition, he hoped, 5 per cent. upon the outlay. He was also glad to inform them that the Admiralty had bought largely of their coal during the year. Before the meeting closed, Messrs. Cosham and W. D. Wethered were unanimously re-elected directors.

A number of the workmen of the Blaenavon Iron Works met to present a purse containing 43l. to Mr. Thomas Smith, late the manager of the mills in those works, in commemoration of the respect in which he was held.

Mr. John Lynn, manager for the Glamorgan Coal Company of their collieries at Gilfach-goch, has been presented by the workmen under his charge with a testimonial upon the occasion of his leaving them to take the management of the Llwynypia Colliery of the same company. The testimonial consisted of a handsome tea and coffee service of plate, with urn and tray to match, and the presentation was made at the Mount Pleasant Inn, Gilfach-goch, by the foreman of the works, who concluded an appropriate speech by reading the inscription on the tray:—Presented to John Lynn, Esq., by the workmen of Gilfach-goch Collieries, on his leaving, as a mark of the estimation in which he was held amongst them as their manager.

The arrivals at Swansea include—Zulia, from Navassa, with 420 tons of phosphate rock, for Vivian and Sons; Pro. Tem., from Bilbao, with 499 tons of iron ore, for W. H. Tucker; Havre (s.s.), from Havre, with 30 tons of silver ore and one case of shoes, to order; Cores, from Bilbao, with 210 tons of iron ore in bulk, for W. H. Tucker; Tocapilla, from Tocapilla, with 392 tons of copper ore and 283 tons of copper regulus, for Elford, Williams, and Co.; and 25 tons borate of lime, for Richardson and Co.; Herradura, from Caldera, with 581 tons of copper regulus, for Elford, Williams, and Co.; 50 tons of bar copper, for H. Bath and Son; 50 ditto, for Richardson and Co.; and 603 bags of silver and copper regulus, cobalt ore, &c., for H. Bath and Son; Gloria de Portugal, from Arelino, with 126 tons of copper ore, &c., for Richardson and Co.; Prince Alfred, from Guayaquil, with bar copper, copper regulus, &c., for Richardson and Co.; and H. Bath and Sons; Jener, Edward, from Bilbao, with 195 tons of iron ore, for W. H. Thomas and Co.; Titania, from Tilt Cove, with 370 tons of copper ore, for H. Bath and Son; Andromeda, from Huella, with 187 tons of pyrites ore; Marguerite, from Cherbourg, with 90 tons of iron ore, for R. Crawshaw.

#### REPORT FROM DERBYSHIRE AND YORKSHIRE.

Nov. 25.—So far as regards trade in Derbyshire, it is decidedly better than it has been, both at the iron works and the collieries. The greater part of the furnaces, from Eekington to the southern part of the county, are in blast, so that there is now a very large output of iron. A considerable quantity of ironstone is being imported from other districts, it being found that in many instances a judicious admixture of the foreign with the local ore produces an improved quality of iron. Pipes and other castings are in better request, as are most qualities of manufactured iron. The demand for coal of nearly all descriptions is now good, and a very large tonnage of household qualities is being forwarded from Clay Cross and other leading localities to London and the South, so that the Midland line are now doing a very extensive business direct to St. Pancras. The Great Eastern, which has extended depots at Whitechapel, is also conveying a very heavy tonnage of household goods, gas and steam coal from the Midland Counties are in good request, and a tolerably fair quantity is being sent to the Western Counties. The establishment of classes for Technical Education have been in every way successful in South Derbyshire, more particularly at Staveley and Clay Cross. Such being the case, evening classes for the ordinary branches of education for youths and adults have been formed at Staveley, and have been taken advantage of by considerable numbers. With the idea of stimulating learners, Mr. C. Markham—who appears to have the happy art of knowing how to make even difficulties attractive—has promised to give money prizes for efficiency. We are happy to be able to state that the name of Mr. C. Markham has been put on the Commission of the Peace; and, from our own knowledge of that gentleman, we feel assured he will be a valuable addition to the Derbyshire Bench, bringing, as he will do, thorough practical ability, and a knowledge of working men, their habits and peculiarities, possessed by few who sit on the magisterial bench. He will, therefore, in every sense of the term, be "the right man in the right place."

Owing to the advance made to the puddlers in Staffordshire a like concession has been demanded by the men in South Yorkshire, and the demand not having been immediately complied with—although not objected to by the masters—there has been a stoppage of work for a few days. There is, however, no likelihood of any interruption to the trade, which just now is tolerably active in nearly all branches. Rails and plates are in brisk request, and there are some very fair orders in hand for castings of various descriptions. The Bessemer Steel Works just now are very busy indeed, and there are orders in hand to the extent of some thousands of tons. It is said, now in course of being given out. Seeing that the duty on Bessemer rails is to be reduced to a mere nominal sum, something like 2s. 6d. per ton, in February, there can be little doubt but there will be a very large demand indeed for delivery at the reduced royalty. The Coal Trade is now far more active than it has been at any time during the year, so that an increased tonnage is being forwarded by the Great Northern Railway to London, and also by the Great Eastern. Steam coal to Grimsby and Hull has been so far in good request, but as recent advices state that the ice is forming and floating at Cronstadt the trade in the North of Europe may now be said to be all but closed for the present year. On the whole, it has scarcely been equal to that of last year, while the competition was much keener, and as a consequence the prices were lower. There is rather more doing in engine fuel into Lancashire, and about an average quantity for the season is being sent to the home ports from Goolle. Coke continues to be largely produced, and for which there is a ready sale for all that is made. At the High Style Colliery, Barnsley, where the coal caught fire some five or six weeks ago, the upper shaft is still sealed up. In the cupola shaft, however, a small fire in extent, so as to open out part of the pit, and raise made some 50 to 60 yds. between it and the place where the fire is known to have existed.

The Council of the South Yorkshire Miners' Association consider the award of the arbitrator satisfactory, and recommend the men to accept the decision, and continue their employment. The dispute arose in consequence of a proposition on the part of Mr. R. C. Clarke, the owner of the collieries, to reduce the price in following up banks from 9s. 3d. to 8s. 9d. per dozen coves, and was, by mutual consent, submitted to Mr. W. Spencer Stanhope, of Cannon Hall, for arbitration. After carefully hearing both sides, he found that, considering the statements and the documents produced, as well as the present position of the average earnings of the general condition of the New Sovereign Colliery, the difference between those collieries in the following up and leading banks, and two kinds of work, a reduction of 2d. per dozen cove should be made, making the price 9s. 1d. per dozen coves, weighing 6 tons. Mr. Stanhope expressed re-

gret for the inconvenience incurred by both parties, and hoped that if any future question arises every means will be tried to arrive at an amicable conclusion before a strike or a lock-out takes place.

THE LANCASHIRE COLLIERY PROPRIETORS, AND THE WAGES QUESTION.—A private meeting of the proprietors of collieries in the Wigan and St. Helen's districts was held at the Angel Hotel, Liverpool, on Thursday, for the purpose of considering the claim made by the colliers for an advance in wages. After a lengthy discussion the meeting was adjourned for a fortnight, no definite conclusion having been arrived at.

#### REPORT FROM THE NORTH OF ENGLAND.

Middlesbrough, Nov. 24.—Our weekly iron market was even stronger than it has been for many weeks past. The demand for pig-iron from all quarters is heavy, and makers generally being well sold forward, are refusing to book orders unless a considerable advance in price is obtained: 47s. for No. 3 was paid by many buyers this week, and only at 51s. for No. 1, and 46s. for No. 4, could consumers get supplies; in fact, there are only a few sellers who are really quoting at all even these rates, the principal houses being so largely committed for the first half of next year, and the prospect of prices becoming stiffer than yesterday's were, has led them to close their order-books altogether—at least for the present. Many consumers have been holding back their orders for next year's requirements, in the expectation that prices would weaken, and that they would be able to drive easier bargains, but they now find a difficulty in making contracts, except at 3s. and 4s. per ton more than the rates quoted a few weeks ago. Continental demand is good, and large sales are said to have been effected lately at the current rates. The more favourable weather of the past few days has brought to the north-east ports a small fleet of vessels and steamers, which have been quickly chartered, but there is still great complaint of the scarcity of craft, which is, in some instances, seriously delaying deliveries. The totals and shipments during the past week or so have not, however, been poor, and large quantities of iron are being got away. The 96 or 99 furnaces now blowing in the district are keeping up a good average make, which will soon be considerably augmented by new furnaces and replacements, which are being rapidly pushed on. Messrs. Mills, Gijers, and Co.—the new blast-furnace company—have completed their arrangements, and are expected to be making a start with the erection of their furnaces almost directly. On Monday night a fire, which resulted in the total destruction of a windmill, and a joiner's shop immediately contiguous, both the property of the Middlesbrough owners, occurred at Cargo Fleet, and was caused, it is said, by the bursting of a ball of slag (from Messrs. Cochrane's furnaces), which was being tipped a little distance from the scene of the conflagration, some portion of the slag falling into the joiner's shop. The damage, which is only partially covered by insurance, is reported to be about 3000l.

All manufactured iron branches are busy. Notwithstanding this is usually the duller portion of the year, the demand for rails and other finished iron is considerable, and some extensive specifications are now in the market. It is sincerely to be hoped that no wages difficulty will spring up to mar the present good prospect of regular employment for the forges and mills during the coming year. Application has recently been formally made to the masters by the men for an advance of 10 per cent., and also for the abolition of Sunday fettling. Both questions will, doubtless, be brought forward at the coming general meeting of the Board of Arbitration and Conciliation, when an amicable disposal of the matters is confidently expected. The shipbuilding trade is still characterised by briskness, and the plate mills of the district are all making good time. On Saturday last Messrs. Backhouse and Dixon, of this town, launched the screw-steamer Fox, a new boat, for Messrs. Williams and Purvis, metal brokers. She was fitted up by Warsop's aero-steam patent, which is the first time that this invention has been applied in this line. The engines were by Messrs. Joy and Co., of Stockton. All engineering departments in the neighbourhood are well employed, and turning out large quantities of work. Bridge builders have their time fully engaged, and the manufacturers of bolts, &c., have almost more than they can manage to accomplish. The Coal and Coke Trades are gradually improving, and favourable reports are received from nearly all parts in the North.

As was stated in last week's Journal, the next meeting of the Iron and Steel Institute will be held on Thursday next, at the South Kensington Museum. Mr. Menelaus will read a paper "On Improved Machinery for Rolling Rails," Mr. G. H. Benson "On the Generation of Combustible Gases under Pressure," and Mr. Thomas Whitwell "On a Fire-Brick Hot-Blast Stove." The papers read at the late meeting by Messrs. I. L. Bell and J. P. Budd will be discussed.

#### THE MIDLAND AND GREAT NORTHERN RAILWAYS.

##### ARBITRATION AS TO MINERAL RATES.

Much surprise is felt by the coalowners in South Yorkshire as to the very tardy manner in which the arbitration as to the mineral rates to be charged by the Midland and Great Northern Railway Companies is being carried out. Some considerable time has elapsed since Sir JOHN KARSLAKE was appointed arbitrator, and so far, all that has been done has been the taking of some evidence on the part of the Derbyshire coalowners, who at the present time enjoy the largest share of the coal trade to London and the South. For several months past the colliery owners of South Yorkshire have suffered much in consequence of the difference in the rate between the two companies, keeping them all but out of the markets in which they formerly did a large business; and after having memorialised the Great Northern for a reduction of the rate, and that company having referred the matter, according to arrangement with the Midland, to arbitration, they think it very hard that their interests should be delayed, and so unnecessarily, by the person appointed as arbitrator.

The evidence already adduced on the part of the Derbyshire owners is to the effect that the coal raised in their districts costs fully 2s. per ton more than that raised in South Yorkshire. Upon what grounds such a statement rests is not apparent, seeing that the Yorkshire coalowners are prepared with evidence to show that they pay a higher rate of wages than almost any other district in the kingdom, whilst, as a rule, they have to pay something like 300l. per acre for the Barnsley seam of coal, as well as for the Silkstone seam—a sum far exceeding what is paid in Derbyshire for a similar coal, taking into consideration the relative thickness of the respective beds. Such being the case, the settlement of the question at once is in every way necessary, seeing that in its present state the trade is, and likely to be, in an unsettled condition so long as no decision is given as to the point in dispute between the two companies, which is of the deepest importance to coalowners—more especially in South Yorkshire.

#### THE COLLIERY EXPLOSION NEAR FROME.

We are by no means surprised at the result of the inquest on the 11 men and boys who were killed by an explosion, on Oct. 22, at the Newbury Colliery, near Frome. After the evidence given disclosing most culpable negligence, and the absence of all ordinary precautions, or, as the Inspector remarked, when all the rules in the pit had been violated, no other than a verdict of manslaughter against BAKER, the bailiff overman; HAMBLIN, the lamp-man; and BALINTON, who was proved to have pulled down a brattice-sheet, could have been expected. The owners and heads of the colliery are in no way to blame, for there was all the necessary material and machinery required for the safe working of the colliery, whilst the underground management was thought to be in the hands of a fully competent and watchful person, having under him an efficient staff of deputies. There is no doubt the men were fully up to their work, but the discipline was of the most lax character, and the proverbial freedom of the district from explosions was taken advantage of to neglect the supervision laid down in the general rules for the safe working of the colliery.

The seam of coal being worked was known to give off a deal of gas, but as the mine had not been long opened out there were no large goaves where gas could accumulate, it required only the most ordinary precautions to prevent an explosion. But, as is usual at all collieries, it does not appear that the working places of the men were properly examined for gas before work was commenced every morning. If such had been the case, seeing that the explosion took place before all the men had descended the shaft, there is little doubt indeed but what the 11 persons would be now alive. The result, however, shows, as we have on several occasions recently pointed out, that a great power is placed in the hands of those whose duty it is to examine the working places every

morning, and that any dereliction of duty on their part might, and may have, led to a serious and terrible catastrophe.

How few of the explosions in which hundreds of lives have been sacrificed have been satisfactorily accounted for. How many may have been caused by an act of omission on the part of a fire-trier, who up late at night, and overcome by drink, has been unable to efficiently go his round, or incapable of discovering the presence of gas. Were it possible to arrive at the truth, it is to be feared that the cause of many of the explosions might be traced to some such cause. The result of the inquest at Westbury shows how necessary it is to have men in position of overmen and fire-triers on whom the greatest confidence can be placed, and whose experience has been such as to justify their appointment to a position in which the lives of hundreds of men are placed in their hands. Such is not only necessary for the sake of the workmen, but also in the interests of the owners, whose property is sacrificed by explosions, often involving the loss in single cases alone of many thousands of pounds.

#### RECENT VISIT TO THE ASPHALTE MINES AND WORKS OF PYRIMONT.

It is not a little curious how little is commonly known in Great Britain of the Asphalt industry of France—one thought so important abroad, and to which we are indebted for whatever asphalt is employed by engineers or architects in our own country. It is equally remarkable how much more largely and universally asphalt is employed on the Continent than it is with us; though there, as here, it competes with artificial—so called—asphalte, made from coal-tar, or its distillation educts, mixed with sand, clay, lime, &c. Chemically this artificial asphalt may not quite improperly take its title, but its physical properties as a cement or a covering are very different from those of the natural asphalt, and, in certain respects, inferior. For mere water-staunch coverings there is no question but that the coal-tar asphalt may, by proper management, be made to answer perfectly; and even as a covering for foot-ways, the experience of many of the trottoirs of Paris proves that in skilled and careful hands it can be so laid as to be moderately resistant of strong sun heat, and perfectly so of moisture, and, therefore, of frost. But even when laid with the utmost skill it does more or less soften with the sun, and the foot leaves its impression if the surface be stood upon without motion for a few seconds. Whilst badly prepared—with any excess of coal-tar—or with the earthy material badly diffused and incorporated, foot-ways of this artificial asphalt get perfectly sticky, and even half liquid here and there; and "blow-holes" of vapour of some volatile coal-oils open here and there, which afterwards permits the entrance of water, and the next hard frost splits up more or less the adjacent surface. No more valuable or suitable use for this artificial asphalt has been indicated than that so largely found for it in Manchester and Liverpool—for the cementing together of granite pavement for the streets. It is strange that this employment for it has been so little noticed in London, where we would commend its extension. This great difference between the physical properties as constructive material of the artificial asphalt, and the natural asphalt of Seyssel or Pyrimont, arises really not so much, if at all, from any differences in the chemical properties of the bituminous matter in each respectively, as to the state in which it is combined by mixture with the solid matters in the two cases. Natural asphalt, more or less like that of Seyssel and Pyrimont, is found in many parts of the world, and in rocks of several different ages or formations, but most usually the rock in which the asphaltic beds are found is calcareous. It is so at Seyssel and Pyrimont; the mines at which places, on the right bank of the Rhone, between Bellegarde (the frontier fortress of France) and Culoz, about an hour and a half by rail from Geneva, are situated in the Jura limestone. When the Pyrimont station is reached, close to the grand sweeping current of the united Arve and Rhone, the asphaltic works of Pyrimont, the property of Monsieur de Malo, are seen close to the river brink, and a short but steep walk, after crossing the railway, brings us up to the nearest of the many asphaltic workings which supply the works. Asphalt is brought to them also from more distant parts of Savoy (still in the Jurassic limestone formation or in the "Molasse") by barges across and a little down the river, as also to Seyssel, which is a few miles lower down the Rhone upon the same bank, and whose natural mineral riches and manufactured material are identical almost with those of Pyrimont.

The land here slopes rapidly from a sort of rolling and rather inclined mountain table to the south-east of the Jura chain, and from 400 to 600 ft. above the Rhone, down to the river's brink. Climbing about 300 ft. up this steep from the railway, we arrive at the first excavated face of rock, from out of which the asphalt has been extracted, and from which much more remains to be got out. There are horizontal galleries lower down, nearly on the level of the rails, from which asphalt is also obtained, the beds to which these lead being deeper in the rock. The asphalt-bearing bed, at the upper working, which are partly opened to the day—a sort of quarry of limited height, with the heavy cap of covering not removed—is from 5 to 8 or 10 feet in thickness, nearly continuous, but very irregular, both in thickness, richness, and form, and commonly with very ill-defined boundaries, at the upper or roof side of the seam at least.

The formation of calcareous rocks, known as the Jurassic, from characteristic they afford of the material of the irregular range of mountains stretching along to the north and north-west of the lake of Geneva, and called in *globo* the Jura—though one long mountain alone properly bears that name—consists of a vast variety of calcareous materials from incoherent marls and hard limestones of nearly pure carbonate of lime, to sandy marls and limestones, loose sands with more or less calcareous dust or mud mixed, and liassic limestones of variable hardness, but often very hard, and containing variable proportions of alumina, magnesia, and silica (in a soluble form), which produce in certain beds admirable hydraulic limes. These various qualities of limestone are in many places found mixed up together in a sort of discontinuous stratification, and in the most irregular way and forms; such is very much the case at these Pyrimont mines. The main mass of the rock exposed is of very variable petrological character, yielding more or less fat or non-hydraulic lime when burnt; but it contains with a rude irregular sort of discontinuous continuity three remarkable beds. The middle one of these, the asphaltic, is the subject of our notice; above it generally (not always) is found a greenish-grey, soft marl, coherent but friable, and below it a seam, of variable thickness, of dense, close, fawn-coloured and grey liassic limestone. The asphaltic bed is of a dark hue, varying from perfect blackness, but without lustre, to a soft grey or yellowish brown. It is, in fact, only a bed of porous limestone, very variably, but most thoroughly impregnated naturally with bitumen. This latter can be completely washed out from pulverised specimens by means of sulphuret of carbon as a solvent, and the limestone then appears almost as white, and soft, and fine as powdered chalk. It is, in fact, almost chemically pure carbonate of lime, containing merely a trace of peroxide of iron, and appears to hold the water found in it merely in mechanical suspension. The asphalt is worked on the plan called in coal workings "pillar and stall," and is all taken out by blasting, the consumption of powder being, however, very trifling; when detached, its fracture is coarse, and generally earthy; the surface of fracture straight, or tending slightly to conchoidal. It is soft, so that one piece of asphalt leaves a large amber-brown streak when rubbed against the surface of another. It is neither sticky nor unctuous to the hand, but soils strongly, and exhales a peculiar smell, which once recognised is not easily forgotten. Occasionally, however, parts of the seam show glistening master joints and cross ones slimed with gluey asphalt; and now and then, though rarely, cavities are found in the rock more or less full of actual liquid asphalt. These indications occur wholly in the harder portions of the seam and in its lower portions.

[To be continued in next week's Mining Journal.]

IMPORTANT PATENT CASE—POUPARD V. FARDELL.—A valuable hint, which may be worth the attention of patent agents in future, was given by Vice-Chancellor Malins in this case. His honour remarked that Mr. Poupard's specification (which was drawn by Messrs. Robertson, Brooman, and Co., of Fleet-street), with the drawings accompanying it, explained his invention with sufficient clearness to prevent the public from being misled. The words "but I do not limit myself to so shaping it" would have been better omitted, but upon none of the authorities cited, and upon no principle of justice, could he come to the conclusion that the introduction of them vitiated the patent. The plaintiff was entitled to the perpetual injunction for which he asked; to the delivery up by the defendant of all patented skids in his possession; to an account, and to an enquiry as to damages; and the defendant must pay all costs of the suit.

Mr. Thomas Smith, late mill manager to the Blaenavon Company who is about leaving the neighbourhood, has been presented with a handsome testimonial, as an acknowledgment of esteem and respect.

## THE GIEW CONSOLIDATED MINES.

In the Parishes of TOWEDNACK and LELANT, CORNWALL.

A MAP of the ST. IVES, LELANT, and TOWEDNACK MINING DISTRICTS may be had, GRATIS, by applying to Mr. TREWEEKE, Uny Lelant, Hayle, Cornwall.

## THE GIEW CONSOLIDATED MINES.

In the Parishes of TOWEDNACK and UNY LELANT, CORNWALL.

APPLICATION for WHOLE SHARES, 48ths (£250); HALF SHARES, 96ths (£125); or QUARTER SHARES, 192ths (£62 10s.), to be made to Mr. T. TREWEEKE, Jun., Uny Lelant, Hayle.

FIFTEEN SHARES only unappropriated.

MR. THOMAS TREWEEKE, JUN., UNY LELANT, HAYLE, CORNWALL, GENERAL MERCHANT.

MR. TREWEEKE has always ON SALE PUMPING ENGINES, WINDING ENGINES, STAMPING ENGINES, and every other description of materials used in a mine, both new and secondhand, of the very best quality and manufacture, and upon the easiest terms.—Nov. 11, 1869.

## CAPTAIN ABASOM FRANCIS, GOGGIN, ABERYSTWYTH.

MINING AGENT, ENGINEER, AND SURVEYOR.

The great success which is attending the opening and working of the Mines in the counties of Cardigan and Montgomery, and the many properties placed at the disposal of Capt. ABASOM FRANCIS, induces him to offer his services, either to ADVISE, INSPECT, REPORT, or SURVEY, for Mining Companies or private shareholders.

For terms, apply to Capt. ABASOM FRANCIS, as above.

MR. W. WHITE (formerly Professor of Chemistry to the Collegiate School, York, and Branham College), ASSAY OFFICE AND CHEMICAL LABORATORY, No. 2, CROWN CHAMBERS, CROWN COURT, THREADNEEDLE STREET, E.C.

Assays of every description of Minerals, and Analyses accurately conducted. Instruction in Assaying and Chemical Science. Lectures to Schools and Public Institutions. Mining Property Inspected and Reported upon. Consultations upon subject-matter of Chemical Patents, Manures, and suspected Adulterations and Impurities of Articles of Food and Commerce. Author of "Chemistry for Students," "Hints from a Chemist," "Chemistry of Vegetation," "England's True Wealth, or Focal Matters in their Relation to Agriculture," "The Graphite Fields of Tigonderoga," "Mineral Resources of Newfoundland," &c., &c.—Oct. 7, 1869.

## GAIFRON WHEAL VAN

SITUATE IN THE PARISHES OF LLANGURIG AND LLANLIDLOES, MONTGOMERYSHIRE.

Capital £12,500, in 5000 shares of £2 10s. each.

Payment—£1 upon application, and £1 10s. upon allotment.

The company to be constituted at first upon the Cost-Book System, and changed after the First General Meeting of the Shareholders into a Limited Liability Company, and registered under the Companies Acts, 1862 and 1867.

Share certificates to be issued to bearer. No registration required, and no liability incurred beyond the £2 10s. per share.

## BANKERS.

THE LONDON AND COUNTY, Lombard-street, NORTH AND SOUTH WALES, Llanidloes.

## DIRECTORS.

W. B. DOWELL, Esq., Conventry, Hammersmith.

BENJAMIN HOLLINGSWORTH, Esq., Hackney, London.

RICHARD NICHOLS, Esq., Priory Park, Kilburn.

(With power to add to their number.)

CONSULTING ENGINEER—MR. RICHARD TREDINNICK.

SOLICITOR—P. GROSVENOR GREVILLE, Esq., 9, Cornhill, London.

SECRETARY (pro tem.)—MR. THOMAS TREDINNICK.

OFFICES,—3, CROWN COURT, THREADNEEDLE STREET, LONDON.

## PROSPECTUS.

The Gaifron Wheal Van Company is formed for the purpose of purchasing and working an extensive and very valuable mineral property situate to the west of the highly productive and profitable Van Mines, and is traversed by several celebrated lodes. The concession is held under a "task-note" for three years, from the 28th day of April, 1869, at a dead rent of £15 per year, and an agreement for a lease of twenty-one years, at one-sixteenth royalty, at the expiration thereof, from Hugh Davies, Esq., to Messrs. Benjamin Hollingsworth, John Williams, and Samuel Morris Ridge, who have assigned their interest to the present company for the sum of £5000. Payment to be made in 1600 shares, £2 10s. paid-up, and the remaining £1000 in cash.

The Van Mine was purchased by the present company during the year 1868 for the sum of £46,000, since which two dividends of £3000 each have been declared, and the profits are monthly advancing. The prospects as regards the future are second to no mine situate in the Principality. The shares, 12,000 in number, have advanced from £4 5s. each to £38 to £40, and to about £450,000, and it is stated by the executive that reserves of £800,000, lead and silver ores, are already accumulated.

The geological and mineralogical characteristics of the two mines are identical, and the several lodes that pass through the company's concession are proved productive for both copper and lead; it is, therefore, reasonably anticipated that profitable results will be achieved.

Large dividends are now being paid by the lead and silver mines of Wales—as, for instance, Minera, Lisburne, Van, Bronfloyd, and many others. Few enterprises amongst our home industries offer such tempting advantages as mining in the Llanidloes district.

Authorities of the greatest experience in practical mining have expressed the most unqualified opinions in favour of the productiveness of the Gaifron Wheal Van lodes. There has already been very large returns made from them, and the workings are at present in that position that trifling expenditure of "time and money" is required to render the workings productive.

The working capital of £7500 is deemed fully ample to develop the lodes, and to render them profitable; and, in the opinion of practical authorities, the mine will, as regards yield and gain, prove second to none in the district—yet, to protect the interests of shareholders, provision will be taken in the Articles of Association to create additional capital, if required.

Applications for shares to be made in the following form, addressed to Messrs. TREDINNICK and Co., Crown-court, Threadneedle-street, London, E.C.:

GENTLEMEN,—I beg to apply for shares in the Gaifron Wheal Van Mine, and hand you herewith a cheque or draft for £1, being the deposit of £1 per share on the number applied for, and I agree to accept the said shares, or any less number than you may allot to me, and to pay the remaining £1 10s. per share on allotment.

Name in full.....

Date.....

Address in full.....

## GAIFRON WHEAL VAN MINE.

London, Oct. 7, 1869.—I have known the above mine and the large tract of ground included in the company's grant for more than twenty years, and am well acquainted with the underground workings and the circumstances under which the works became abandoned some few years ago, and these were wholly exceptional, having no reference whatever to the merits of the adventure, but arising solely from the sudden death of the largest shareholder, and the circumstances that sprang therefrom. At this time the returns of copper were considerable, and ranged for a long period at from 20 to 30 and up to 50 tons per month, worth £25 per ton. In the bottom of the deep adit level there are two sinkings in the ore, and to a depth of from 20 to 25 fms., from which large quantities of ore were raised. There are other points of the lode wrought to an inconsiderable depth below this adit level also productive, and in all these workings and sinkings the lode is still productive, and became suspended in consequence of having no pumping-power to drain the water. Above the adit level the ore is chiefly taken away, and in several places up to surface. There is a lead lode almost entirely unwrought, but in the partial operations effected the vein is found to be highly crystalline, and contains large quantities of carbonate of lime, quartz, and charged with mineral, and very similar in character to the other lead lodes traversing the district. The company's grant contains also other lodes, and there are many features interesting to practical miners as yet unexplored. A water-wheel, of 40 feet diameter, will drain the mines to a depth of fully 100 fathoms, and there is a never-failing supply of water, thus avoiding the heavy outlay and expense of maintaining steam machinery. A capital of £5000 is, in my opinion, fully sufficient to erect the requisite machinery, open out and bring to profitable play, and as soon as the water is out of the sinkings and workings below the deep adit level returns of rich copper ores can be brought to market; whilst discoveries of deposits of lead may be made at an early date from the commencement of operations on the lead lodes. In conclusion, I beg to express my confidence in the undertaking, and feel assured that you will meet with substantial success upon working the lodes in a practical and economical manner.

JOHN REYNOLDS.

MESSRS. THOMAS TREDINNICK AND CO., DEALERS IN GOVERNMENT SECURITIES, STOCKS, BONDS, DEBENTURES, AND SHARES.

3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

Are DEALERS for CASH or ACCOUNT in the subjoined SECURITIES, viz.:

CONSOLS, and the ENGLISH FUNDS.

Foreign Funds—Brazilian, Chilean, Dutch, Egyptian, Greek, Italian, Mexican, Peruvian, Portuguese, Russian, Spanish, Turkish, and others.

Preference Railway Shares and Stocks, Debentures, Bonds, and ordinary Stocks and Shares.

In Colonial Government Securities—Canada, Cape, New Brunswick, Australia, New Zealand, &c.

British and Foreign Mines.

Docks, Insurance, Canal, Water, and Gas Shares.

Mortgages and Loans negotiated in all saleable or unquestionably valuable Securities.

Miscellaneous.

ON SALE,—Government Securities, paying from 6 to 8 and 10 per cent., and other properties paying from 10 to 12 and up to 15 per cent.

Just published, 8vo., price 1s. First Number of a Serial of Twelve Parts; early application solicited.

THE "SCIENCE OF INVESTMENTS:"

Consols and the Funds; Colonial Securities; Foreign Bonds and Loans; Our Home, Colonial, and Foreign Railways; Joint-Stock Banks, Limited and Unlimited; Insurance, Dock, Canal, and Miscellaneous; English and Foreign Mines. These several mediums of investment analysed and portrayed in their several and intrinsic worth. There is a time to buy, and a time to sell.

By RICHARD TREDINNICK, Consulting Engineer.

3, Crown-court, Threadneedle-street, London, E.C.

## In the Court of the Vice-Warden of the Stannaries.

Stannaries of Devon.

IN the MATTER of the COMPANIES ACT, 1862, and of the EAST WHEAL RUSSELL MINING COMPANY.—TENDERS will be RECEIVED at the Registrar's Office, Truro, until Friday, the 3d day of December next, stating the highest price which will be given for both or either of the undermentioned ENGINES now being at

## EAST WHEAL RUSSELL MINE,

In the Parish of TAVISTOCK, namely:—ONE 40 in. ENGINE, 9 ft. stroke equal beam, with TWO 10 ton BOILERS, and ONE 12 and 7 in. combined WHIM ENGINE and cage.

The above may be inspected on application to JOHN JAMES, the officer in possession at the mine.

HODGE, HOCKIN, AND MARRACK, Solicitors, Truro. Dated Registrar's Office, Truro, November 25th, 1869.

## In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the SOUTH TREVENNA TIN AND COPPER MINING COMPANY (LIMITED).—Notice is hereby given, that ALL CREDITORS of the above-named company are REQUIRED, on or before Thursday, the 9th day of December next, TO SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to—

FREDERICK MARSHALL, Esq., Registrar of the said Court at Truro. Dated Truro, November 25th, 1869.

## In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the SOUTH TREVENNA TIN AND COPPER MINING COMPANY (LIMITED).—By an Order made by His Honour the Vice-Warden in the above Matter, dated the 23d day of November inst., on the petition of William Howard Willocks, of Plymouth, in the county of Devon, Mining Engineer, a contributory and also a creditor of the said company, it was ORDERED that the said SOUTH TREVENNA TIN AND COPPER MINING COMPANY (LIMITED) should be WOUND-UP by this Court under the provisions of the Companies Acts, 1862 and 1867.

B. J. B. FOWLER, of Plymouth (Solicitor for the Petitioner). J. G. CHILCOTT, of Truro (Agent for the said Solicitor). Dated Registrar's Office, Truro, this 23d day of November, 1869.

## Under the Companies Act, 1862.

TO COLLIERY PROPRIETORS, AND OTHERS.

IMPORTANT SALE of VERY VALUABLE PLANT AND MACHINERY, at the WYNN HALL COLLIERY.

Within a MILE of RUABON STATION, on the Great Western Railway.

MESSRS. CHURTON AND ELPHICK beg to announce that they have received instructions from the Liquidators, appointed for winding-up the affairs of the Wynn Hall Coal Company (Limited), to SELL, BY AUCTION, on Wednesday, Thursday, and Friday, December 1, 2, and 3, 1869, commencing each day at Half past Eleven for Twelve o'clock most punctually, the WHOLE of the very EXTENSIVE, and to a great extent recently-erected, PLANT of the COMPANY, among which will be found TWO highly finished first-class HORIZONTAL WINDING ENGINES, 40 and 50-horse power each, by Leigh, of Patricroft; TWO PUMPING ENGINES, DONKEY ENGINE, FIVE large BOILERS, about 150 pit wagons; 60 tons 14-lbs. pit rails, a large part scarcely used at all; complete sets of 5-in., 8-in., and 13-in. pumps and pump rods; about 60 tons locomotive rails, and many points and crossings; 30 to 40 sets of pony and horse gears; a 20-ton railway weighing machine, by Kitchin, with Hinde's latest improvements; two of Kitchin's pit beam 25-cwt. machines, with Hinde's additions; entire fittings of two smithies, quantity of steel churns and sinking tools, large galvanised and wooden buildings, many hundred square feet of wooden and galvanised roofing, powerful capstan wind, new and old flax and round wire ropes, large quantity of ashlar blocks for engine beds and wrought and cast scrap, several lots of break and other chains, quantity of new iron and timber, six tumbling jacks and coal screws, several sets of landing catches, four pit carriers, two fifty pit heads, office furniture, dials and other surveying instruments, and other articles too numerous to mention. Also the company's interest in about eighty 10-ton trucks, partly purchased.

Catalogues are in course of preparation, and may be had a week prior to the sale from the Liquidators, Messrs. R. C. RAWLINS and T. E. MISHALL, C.E., who will give every information on application personally, or by post to the colliery, Ruabon; and from the Auctioneers' offices, Chester, and Whitechurch, Shropshire.

## BY ORDER OF LIQUIDATORS.—SPAIN.

THE THREE VALUABLE FREEHOLD COPPER AND SULPHUR MINES, known as Lapilla, Companario, and Evidencia, the property of the Lapilla Pyrites Company (Limited), together with the PLANT and MACHINERY, and cottages for about 200 miners, advantageously situate in the province of HUELVA, SPAIN, within easy distances of the important port of Huelva, near to Tharsis Mine and Tharsis Railway; also upwards of 3000 tons of ore now lying on the banks of the Lapilla Mine.

MESSRS. DEBENHAM, TEWSON, AND FARMER WILL SELL, BY AUCTION, at the Mart, near the Bank of England, in the City of London, on Tuesday, November 30, at Two o'clock, the desirable and valuable FREEHOLD MINES, known as

## LAPILLA, COMPANARIO, AND EVIDENCIA.

Situate in the province of HUELVA, SPAIN. They have been fully opened, and preparations have been made for carrying on operations on an extensive scale. Upwards of 11,000 tons of the mineral have been supplied to large manufacturing firms in England, who are willing to bear testimony as to its value; also upwards of 3000 tons of pyrites ore.

Particulars, with conditions of sale, may be obtained of Messrs. LEWIS, MUNN, NUN, and LONGDEN, Solicitors, 8, Old Jewry; and of the Auctioneers, 80, Cheapside, London.

IN VOLUNTARY LIQUIDATION UNDER THE COMPANIES ACT, 1862. THE LLANGYNOG UNITED MINING COMPANY (LIMITED). VALUABLE LEASEHOLD LEAD MINE, AND MINING PROPERTY, PLANT, AND EFFECTS FOR SALE.

MR. T. W. HILL is instructed by Mr. Robert Woodford, the Liquidator appointed by the Company, to OFFER FOR SALE, BY AUCTION, at the Wynnstay Arms Hotel, in Oswestry, on Thursday, the 9th day of December, 1869, at Three o'clock in the afternoon precisely, in one or more lots, and subject to conditions then to be produced, THE ENTIRE BENEFICIAL INTEREST of the LLANGYNOG UNITED MINING COMPANY (LIMITED), in the LLANGYNOG LEAD MINES, comprising all the valuable Productive and Extensive Mines, Veins, and Beds of Lead, Ores of Lead, and other Metals and Minerals, known collectively as the Llangynog Lead Mines, Reservoir, Water Supply Rights, Easements, and Interests thereto belonging or appertaining, comprised in the respective leases, licences, and agreements for leases, under which the same are now held and have been long worked by the company, situate in the several parishes of LLANGYNOG and PENNANT, in the county of MONTGOMERY.

And also the WHOLE of the MOVABLE PLANT and MACHINERY of the said company, which comprises TWO POWERFUL WATER WHEELS for pumping and winding, with all necessary gearing, capstan, ropes, and apparatus, office furniture, and other effects at the mine.

The mines, machinery, and plant will be found in full working order and condition, and may be inspected at any time upon application to the Manager at the Mines.

Detailed particulars of the various leasehold and other interests and plant will be shortly ready, and may be obtained at the offices of the Llangynog United Mining Company (Limited), Foregate-street, Chester; Messrs. DENNIS and GLENIE, mining engineers, Hafod-y-bwch, Ruabon; or Messrs. LONGUEVILLE, JONES, and WILLIAMS, solicitors, Oswestry; at each of which places maps of the property may be inspected, and all further information obtained.

## LINTZ COLLIERY AND FIRE-BRICK WORKS.

MR. CHARLES BROUGH WILL SELL BY AUCTION, by order of the Liquidators of the Lintz Colliery Company (Limited), at the Queen's Head Hotel, Pilgrim-street, Newcastle-upon-Tyne, on Saturday, 11th December, at Two o'clock precisely, all that VALUABLE and CURRENT-GOING COLLIERY, called LINTZ COLLIERY, in the county of DURHAM, about nine miles from NEWCASTLE, comprising an area of 650 acres, estimated in the aggregate of the Main Coal, Busty Bank, Three-quarters, and Brockwell Seams, to contain 1825 acres or thereabouts of unworked COAL, together with the COLLIERY PLANT, agents' and workmen's houses, stables, fire-brick works, 158 coke-ovens, and all other erections and buildings belonging thereto.

The works are connected with the Blaydon and Consett Branch of the North-Eastern Railway.

Further particulars may be obtained at the offices of the Auctioneer, Blackett-street; of Mr. G. H. GOOD, the resident agent, Burnopfield; Mr. J. N. BROWN, Anglessey-Wharf, Union-passage, Birmingham; Mr. H. W. WAINWRIGHT, Dudley, Worcestershire; or Messrs. R. P. and H. PHILIPSON, solicitors, Town Hall-buildings, Newcastle-upon-Tyne.

## TO CAPITALISTS.

TO BE SOLD, BY PRIVATE TREATY, a VALUABLE COLLIERY, in FLINTSHIRE, NORTH WALES, situate in the central part of the above coal district, and close upon a main line of railway, at a distance of twenty-eight miles from the port of Birkenhead, and seven miles from that of Connaught Quay.

The property is held under leases, and with adjoining land that may be obtained, comprises about 130 statute acres. Two commodious pits have been recently sunk through the different seams of coal, &c., with excellent new plant and machinery, consisting of pumping, winding, and other engines, and all necessary fittings requisite for raising coal at the rate of 100,000 tons per annum. The seams of coal already proved are three in number, suitable for household and steam purposes, including the Canal Coal, which is well adapted for gas purposes. With a moderate outlay these seams can be developed, and the colliery put in position to yield 1,000 tons of coal per week in a short time.

For further particulars, apply to Messrs. MULLINGS, ELLETT, and Co., Solicitors, Criccieth; or to Mr. WALTER EDDY, Fion, Llangollen; or to Mr. ROBERT CADWALADR, Coodpoeth, near Wrexham, who will show the works.

## Charity Commission.

IN the MATTER of the CHARITY CALLED "THE CHURCH LAND CHARITY," IN the PARISH of GAYTON, IN the COUNTY of NORTHAMPTON.

BY DIRECTION of the BOARD of CHARITY COMMISSIONERS FOR ENGLAND AND WALES.—Notice is hereby given, that the Trustees of the above-mentioned Charity propose (with the authority of the said Board) to GRANT a LEASE of ALL the IRONSTONE and IRON ORE under a close of arable land at GAYTON aforesaid, containing 9 acres or thereabouts, for a term of FOURTEEN YEARS, with the reservation of an annual minimum rent of £250, and of the several royalty, rents, and provisions to be contained in such lease, unless some sufficient objection to the grant of such lease shall be made known to the said Commissioners within 21 days from the first publication of this notice.

Further particulars respecting the proposed lease may be ascertained by enquiry from Mr. RICHARD HOWES, Solicitor, Northampton.

Any person prepared to notify such objection should forthwith transmit the same to the said Commissioners in writing, addressed to their Secretary, No. 8, York-street, St. James's-square, London. Dated the 18th day of November, 1869. HENRY M. VANE, Secretary.

## IMPORTANT AND EXTENSIVE IRONWORKS, AT LAWTON, NEAR SHIFFNAL, SHROPSHIRE.

Adjoining the Great Western Railway.

TO BE SOLD, BY PRIVATE CONTRACT, subject to conditions as to title, all those recently and substantially-erected WORKS, situated near to SHIFFNAL, and known as

## THE LAWTON IRON AND STEEL WORKS.

Lately in the occupation of THE LAWTON IRON AND STEEL COMPANY (LIMITED).

The premises have been built regardless of cost on the most improved and economic principles, and judiciously arranged throughout with every convenience for carrying on an extensive and profitable trade.

The erections comprise lofty sheet mill, with iron-plate floor, containing one 4 ft. by 20 in. and one 3 ft. by 18 in. train of rolls, both trains worked by a 20-horse high-pressure horizontal steam engine, four heating and annealing furnaces, three pair cropping and shearing shears, wood engine-house, and 6-horse pumping engine, two wells, cisterns, &c., with lofty stack; a conveniently placed set of offices, commodious warehouse, iron-plate floor, with store room and stockholder's office attached, fitted with Kitchin's patent weighing machine, to weigh 30 cwt., cutting shears, &c., opening on to the railway siding by folding doors, with shed roof over.

Excellent wire mill, iron-plate floor, two trains of rolls complete, with supplementary speed to finishing rolls; also a train of rolls, the whole worked by a 30-horse high-pressure horizontal steam engine, and two heating furnaces adjoining, covered with shed roof; two capital firing boilers, one 30 feet by 6 feet, one 24 feet by 6 feet.

Grease store and vault under superior eight-hole casting shop, capacious water cistern and supports, with vertical pumping engine, well reservoir, &c.

Lathe shop, with powerful lathe, 24 feet bed, capable of turning sheet, forge, and wire rolls; massive crane, and 6-horse high-pressure engine and boiler, slack hole, and stack; millwrights' shop, blacksmiths' shop, with double hearth, &c.

The Old Forge, iron-plate floor, 75 feet by 48 feet, with 16 in. forge train, by Perry and Son, for bills; set of rolls for bars, worked by 40-horse horizontal high-pressure steam engine, two force pumps, two pair shears, &c.; 6-ton helve, or tilting hammer, with machinery all complete, worked by a 25-horse high-pressure steam engine, twelve puddling furnaces, and shed roofs attached; six powerful boilers, and two lofty stacks.

Clay house and mine house, two-stalled stable, and pig-house.

The New Forge, with iron-plate floor, 72 feet by 33 feet; forge train complete, 5-ton tilting hammer, worked by a 30-horse horizontal high-pressure steam engine, with three 12 feet by 7 feet boilers, four puddling furnaces, and sheds over, and lofty stack.

Charcoal Forge, with three fires on the hollow principle, 4-ton helve, and grindstone, attached, driven by a 30-horse high-pressure steam engine, with blowing cylinder, blast regulator, &c.; machine house, with Kitchin's patent machine, to weigh 15 tons, slabs, &c.

There are six comfortable cottages, for the accommodation of the workmen, let at 2s. a week each.

The whole of the above, with a large portion of the railway siding, comprise an area of 2½ acres, which is freehold inheritance.

The works are admirably situated on the Great Western Railway, affording direct communication to all parts of the kingdom. They have been erected in a most substantial manner, are in full working order, and immediate possession can be had, whilst their proximity to the recently-discovered coal fields of Llan Granville and others, in the immediate neighbourhood, considerably enhances their value.

The whole of the TRADE PLANT, FIXTURES, and COSTLY MACHINERY will be included in the sale.

Further particulars may be had of Mr. ANDREW PHILLIPS, Solicitor, Shiffnal, and Messrs. FALLOWS and SMITH, Temple-row, Birmingham.

## SOUTH EXMOUTH MINE, HENNOCK, DEVON.

FOR SALE, BY PRIVATE CONTRACT, the following, viz.:

40 in. cylinder PUMPING ENGINE.

25 in. cylinder WHIM ENGINE, with CRUSHER attached.

60 fms. 11 and 12 in. PUMPS in shaft.

30 fms. 11 and 12 in. PUMPS at surface.

Timber, and various useful mining materials.

Apply to Capt. JOHN CORNISH, Frank Mills Mine, Christow; or to Mr. J. O. HARRIS, Public Accountant, 2, Gandy-street, Exeter.

## FOR SALE.

THE ULING COAL MINES, situated in the district of NAGA, in the Island of CEBU (Philippine Islands). The distance from the mines to the sea shore is 10 kilometres, the whole of which is a carriage road.

The company possesses a royalty of 60 lots, comprising together 9,000,000 of square metres of ground, with several seams of COAL, two of which, of three and four metres in thickness, have been proved through a distance of two kilometres.

The principal workings consist of two drifts, each 550 metres in length, which have already cut through three of the coal seams, and are now (August, 1869) calculated to be within 50 metres distance of the large ones, and at a depth of 150 metres from the surface of the ground.

The Spanish war steamers have made use of this coal, the consumption of which has been recommended by the Government.

The company have cattle in abundance, carts, and every requisite means for conveying the coal as quickly and as economically as possible.

There are in the neighbourhood of the mines large forests, and large lots of uncultivated ground, which now produces timber necessary for the use of the mines, and which may afterwards be turned into tobacco or sugar cane plantations, for which purpose it is admirably adapted.

The mines in the Philippine Islands are not subject to any tax, and all machinery required for coal digging, &c., is free of any duty.

The laws allow any foreigner to purchase, keep, and work the mines.

The sale will take place in Manila, by public auction, on the 31st May, 1870.

For further particulars, apply to ROSAS HERMANOS, or to ANTONIO DE AYALA, Manila.

## RHENISH PRUSSIA.

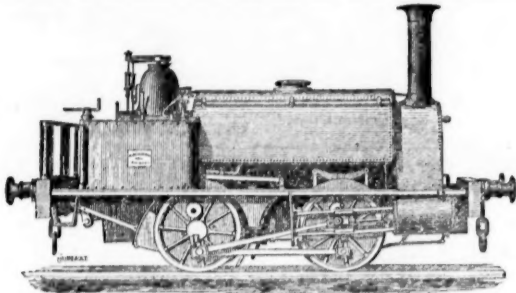
SEVERAL VALUABLE MINES FOR SALE,—LEAD COPPER, BLENDE, and IRON. The Mining Laws of Prussia give with the concession to work, an absolute right of property in the mine for ever, subject only to a royalty of 2 per cent.

Apply to Mr. YOUNGHUSBAND, 6½, Wilhelm Strasse, Bonn-on-the-Rhine.

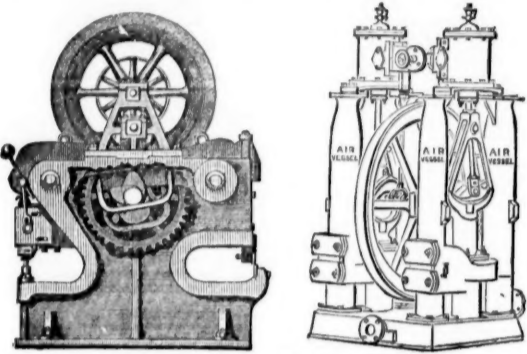
THE HENDREDDU SLAB QUARRY TO BE LET, on the ABERLEFFENY VEIN, situated about three and a half miles from a railway station, in a very advantageous place to work. The sett contains about SEVEN or EIGHT HUNDRED ACRES, with water power to work a large number of machines. The quarry is sufficiently open to prove the quality of the rock and the regularity of the foot joints, which are good. Slabs of large dimensions are made, which can be seen.

Apply to Mr. EDWARD DAVIES, Mawddwy Cottages, Dinas Mawddwy, Merionethshire.

**RAILWAY WAGON WORKS, BARNSELY.**  
**MESSRS. G. W. AND T. CRAIK**  
 ARE PREPARED TO  
 SUPPLY COAL AND COKE WAGONS  
 OF EVERY DESCRIPTION,  
 Either for cash, or by deferred payments through wagon-leasing companies.  
 WAGONS PROMPTLY REPAIRED.



**TANK LOCOMOTIVES,**  
 FOR SALE OR HIRE.  
**HENRY HUGHES AND CO.,**  
 LOUGHBOROUGH.



**JOHN CAMERON,**  
 MAKER OF  
 STEAM PUMPS, PORTABLE ENGINES, PLATE BENDING ROLLERS,  
 BAR AND ANGLE IRON SHEARS, PUNCHING AND SHEARING  
 MACHINES, PATENT OF THE DOUBLE CAM LEVER  
 PUNCHING MACHINE, BAR SHEARS, AND RAIL  
 PUNCHING MACHINES,  
**EGERTON STREET IRON WORKS,**  
**HULME, MANCHESTER.**  
**THE BEVERLEY IRON AND WAGON COMPANY,**  
 LIMITED,  
 MANUFACTURERS OF RAILWAY WAGGONS, WHEELS AND AXLES,  
 CARTS, LORRIES, WOOD WHEELS, PATENT WROUGHT IRON WHEELS  
 AND AXLES, BARROWS, PUMPS, DOUBLE PURCHASE CRABS, &c., &c.  
 IRON WORKS—BEVERLEY, YORKSHIRE.  
 Catalogues free by post.

**MARTIN'S PATENT PISTON,**  
 FOR STEAM AND OTHER ENGINES,  
 Effecting a SAVING OF FIFTEEN PER CENT. IN FUEL, with TEN PER  
 CENT. ADDITIONAL POWER.  
 Address,—  
**MESSRS. WILLIAMS AND BOLTON,**  
 ST. HELEN'S FOUNDRY,  
 (Patent Piston) SWANSEA.

**WARTON NATIVE OXIDE OF IRON**  
 IS SUPERIOR TO ANY OTHER PAINT IN  
 BODY AND BRILLIANCY OF COLOUR,  
 AND, UNLIKE LEAD PIGMENTS,  
 IS INNOCUOUS TO THE WORKMEN USING IT.  
 Prices may be obtained on application to the agents,—  
**H. J. WALDUCK AND CO.,**  
 No. 1, MARKET STREET, MANCHESTER.

**IMPROVED VALVES AND TAPS,**  
 FOR WATER, STEAM, GAS, &c.,  
 MADE BY  
**MESSRS. MATHER AND PLATT,**  
**SALFORD IRONWORKS, MANCHESTER.**  
 ILLUSTRATED SHEET, WITH PRICES,  
 Can be had on application.

**BUCK AND WATKIN,**  
 ENGINEERS AND MACHINE TOOL MAKERS,  
 MAKERS OF  
**DRY CLAY BRICK MOULDING MACHINES.**  
 On the best principle.  
**BEACON IRON WORKS,**  
 WELL LANE, HALIFAX.

**PATENT SELF-REGISTRATION COLLIERY**  
**WINDING INDICATOR.**

**THIS INDICATOR,** in addition to its ordinary use, INDICATES  
 and REGISTERS the NUMBER OF WINDINGS, thus enabling the  
 Manager to check at a glance the returns of the Banksman or Clerk.  
**PEPPER MILL BRASS FOUNDRY COMPANY,**  
 DARLINGTON STREET, WIGAN,  
 MAKERS.

**THE PATENT SELF-ACTING MINERAL DRESSING**  
**MACHINE COMPANY (LIMITED).**

**THE PATENT JIGGING MACHINE COMPANY.**  
**T. CURRIE GREGORY, MINING ENGINEER.**  
 OFFICES,—62, ST. VINCENT STREET, GLASGOW.

These companies possess the patents for the most approved machinery for all  
 the processes of dressing ores, whereby a very great saving in cost is effected.  
 The machinery is in successful operation at several mines in the kingdom,  
 and is in increasing demand.  
 Mr. GREGORY, in connection with skilled engineers in various mining dis-  
 tricts, has paid for the last two years special attention to this important  
 department of mining, and it is only now, the process being in successful opera-  
 tion, that the attention of the public is called thereto.  
 Mr. GREGORY will be pleased to answer all enquiries, and give orders for in-  
 spection. He is prepared to give designs and estimates for the supply of ma-  
 chinery, and for the laying out of floors.

**BRITISH, COLONIAL, AND FOREIGN PATENTS,**  
 REGISTRATION OF DESIGNS, COPYRIGHTS, TECHNICAL TRANS-  
 LATIONS, DRAWINGS, &c.  
**MICHAEL HENRY.**  
 Mem. Soc. Arts, Assoc. Soc. Engineers, Compiler of the "Inventors' Almanac,"  
 and the Author of the "Defence of the Patent Law."  
**PATENT REGISTRATION AND COPYRIGHT AGENT AND ADVISER.**  
 Mr. HENRY has had special experience in technical French, and in French  
 Manufacturing and Commercial Matters.  
 Inventors advised in relation to Patents and Inventive and Industrial Ma-  
 ters. Printed information sent free by post. Specifications drawn and revised.  
 Searches conducted. Abstracts, Cases, and Opinions drawn.  
 Offices, 68, Fleet-street, E.C., London, corner of and entrance in Whitefriars-  
 Street.

# The Virtuous Lady Mining Company

(LIMITED).

INCORPORATED UNDER THE COMPANIES ACTS, 1862 AND 1867.

CAPITAL £15,000, IN 15,000 £1 FULLY PAID-UP SHARES.

N.B.—The whole of the shares are taken up. The present quotation is £2 10s. per share, and a limited number only will be disposed  
 of at that price, as they are rapidly advancing in value.

The directors were chosen at the First General Meeting of Shareholders, which took place on Wednesday, September 1, 1869,  
 at the Bedford Hotel, Tavistock.

BANKERS—THE WEST OF ENGLAND AND SOUTH WALES DISTRICT BANK.

SOLICITOR—MR. EDWARD CHILCOTT, Tavistock.

SECRETARY—MR. THOS. J. BARNARD, 5, Abbey Mead, Tavistock.

The Virtuous Lady Mine is situated about 3 miles south-west of  
 the town of Tavistock.

The sett, which is very extensive, and comprises the most highly  
 mineralised ground in the two counties of Devon and Cornwall, is  
 held upon lease for 21 years, from Sir Massey Lopes, Baronet, dated  
 July, 1869, upon a royalty or dues of 1-18th.

Almost unlimited water-power is available, as the rivers Walk-  
 ham and Tavy pass through the sett.

Historical records set forth that this mine was worked by the  
 ancients for silver, and that the caverns which were formed by  
 mining industry were in later years inhabited by banditti. It is  
 generally known that well advanced in the present century the  
 mine has returned tens of thousands of tons of rich copper ore.  
 It is, however, quite apparent that in the past the intrinsic value of the  
 mine was unknown, and, therefore, never duly appreciated, or it would have  
 been more developed, and the treasures already discovered not left for the pre-  
 sent proprietors. It was for years recognised as the mine of mines from its  
 immense returns of rich copper ore, nevertheless the deepest workings are only  
 about 17 fathoms from surface, which will readily show that really practically  
 the mine has hardly been explored at all. The courses of ore so far worked upon  
 are not what are called regularly defined; they are what are termed "flats,"  
 they have, however, perfect walls, and when descending into the earth have a  
 beautiful underlie; but suddenly the descent ceases, and the courses of ore run  
 away in a "flat" direction for some considerable distance, when they again  
 take a descent, with a fair underlie. It is from these "flats" that tens of thou-  
 sands of tons of copper have been extracted, and the horizontal courses alone  
 will unquestionably yield great quantities of ore, as they, comparatively speak-  
 ing, have thus far been but slightly worked; the "flats" are, however, merely  
 out-throws, yes, threads only of and from the gigantic quartz lodes which are  
 100 to 200 feet wide. By a winze or sink that has been put down some 8 fms. in  
 one of the levels the ground below is found producing good and large stones of  
 rich ore, and the evidence appears clear that these immense quartz lodes will  
 when followed to the deep make most extensive lasting deposits of copper ore.

The extensive and remarkable crystallisation and decomposition throughout  
 these great quartz lodes is a further striking evidence of the chemical action  
 caused by affinity, change, or formation of existing very large metallic mineral  
 bodies below, and further, the great canner lode to the south (upon which opera-  
 tions as showings only have been done as yet), and dipping to the north, will  
 at about 40 fathoms from surface form a junction with the great north lodes,  
 when almost unheard of masses of copper may be expected to be discovered.

The mine is in full operation, a water wheel and crushing machine and all the  
 necessary machinery being in the active course of erection, and temporary dress-  
 ing floors are laid out in order to dress the ore upon a small scale, until the ma-  
 chinery is put in motion, when more extensive workings generally can be carried  
 on. The machinery will be started by the end of September, when the old work-

ings will be drained, and the shaft commenced to be sunk 15 fathoms deeper  
 and cross-cuts driven to intersect and cut the lodes at that depth, which can  
 hardly fail to yield immense deposits of copper ore; but apart from any new  
 explorations and anticipated great discoveries in entirely new ground, constant  
 enquiries are being made by "tributers" for "pitches" in the old workings as  
 soon as the mine is drained. To the uninitiated in practical mining it may be  
 observed that "tributers" will take the only little bit of speculation there may  
 be in the mine, as they receive nothing save a certain share (and this for a  
 limited time only), of the sale of the ores they search for and discover.

We will now draw attention to the assays made by Dr. Phipson:—No. 1 sample,  
 yellow and black ore, clean in hard substance, 2 per cent. copper, 19½ ozs. of  
 silver to the ton; No. 2, peach, briar, yellow and black ore intermixed, 14½ per  
 cent. copper, 16 ozs. of silver to the ton; No. 3, briar, with a little black ore,  
 6½ per cent. copper, and 10 ozs. of silver to the ton.

An elaborate and most careful general mineral analysis by Dr. Phipson, of  
 the mineralised priany and other matters of the lode now being worked upon,  
 gives a result of the existence of copper, silver, lead, tin, antimony, cobalt, nickel,  
 iron, zinc, and sulphur—strong traces of the whole—but the chief and only pay-  
 ing quantity being copper, the silver contained in it enhancing its value. Mr.  
 J. Harvey, Assayer, of Tavistock, has made several copper assays, the products  
 of different specimens ranging from 6 to 25 per cent. A killas and peach have  
 also been submitted to Dr. Phipson, and Mr. W. Richards, gold and silver  
 assayer, of London, to be tested for gold, by analysis and assay, and out of very  
 small samples, both gentlemen found strong traces of gold. It is not at all  
 unlikely the rich deposits of quartz in the old workings may contain both gold  
 and silver, not visible to the eye, but rich enough to yield a profit upon pulverisa-  
 tion and proper treatment. Reference may be drawn to the fact that this mine  
 has received large sums of money for its quartz specimens, as simply ornamental  
 works of nature, it having been the rule to search every man coming from  
 underground.

Ample capital is provided to put up most extensive and all necessary machi-  
 nery, and thoroughly explore the mine, and at the same time the parts of the  
 lodes above water level now being worked upon, which are productive in rich  
 ore, and daily growing more valuable, will at once, and more especially when  
 the machinery is in motion, so that the crusher can be used, furnish profits  
 which can only result in handsome dividends at an early date.

Knowing that reports by mining agents embodied in a prospectus are more  
 or less ignored, none accompany this circular. The mine is in full operation,  
 and can be visited and inspected by any intending investor, mining inspector,  
 or visitor upon their own account, upon application to the secretary for a visit  
 ing card.

The company is formed, the shares are all taken up, and the mine stands upon  
 its own merits, open for the world to criticise.

Shares can be purchased of the Secretary, Mr. THOS. J. BARNARD,  
 5, Abbey Mead, Tavistock, who is prepared to transfer a limited  
 number at £2 10s. per share.

N.B.—The machinery was started on Saturday, October 16th, with the greatest success.

## HENRY VORLEY,

IMPORTER AND REFINER OF

## OILS, TALLOW, GREASE, AND TAR.

WHOLESALE DEALER IN

Cotton Waste, Lamp Cottons, Steam Cement, Colours, Paints,  
 and General Colliery and Engineers' Stores.

MAKER OF "THE 'REGISTERED' DOUBLE-REFINED MACHINE OIL,"

For Engines, Lathes, Planing Machines, &amp;c.

AND THE IMPROVED BROWN CORVE OIL FOR COLLIERIES

**BRAMALL LANE, SHEFFIELD.**

## A SAVING OF ABOUT FIFTY PER CENT.

Is effected by the use of the **PATENT DON LUBRICATING OIL,**



In place of OLIVE and other kinds ordinarily used on STATIONARY, LOCOMOTIVE, MARINE EN-  
 GINES, and MACHINERY of all kinds, and the undersigned are so satisfied of the correctness of this  
 statement, that they are willing, at their own risk, to forward a cask of about 30 gallons for trial to any  
 respectable person or company, on the understanding that it may be returned in a month if it should not  
 answer, when payment would not be required, except for the quantity used.

There are two kinds,—the medium for engines and heavy bearings, and the light for spindles and light  
 work. This oil will lubricate as well, and lasts as long, as olive, neats'-foot, and other expensive kinds,  
 and is superior to rape, which is fully 50 per cent. dearer.

It never "CLOGS," nor leaves any "GUMMY" deposit upon the bearings, which, therefore, never re-  
 quire cleaning or scraping, whereby much time, labour, and expense are saved. It is in use and approved  
 of by the majority of the iron and coal companies in West Lancashire, where it was first introduced but  
 a few months ago, also by several ocean steamer and ferry proprietors on the Mersey and elsewhere.

Printed particulars and testimonials sent, post free, to any address.

**DUNCAN BROTHERS, 17, Unity-buildings, Lord-street, Liverpool.**

## RAILWAY CARRIAGE COMPANY (LIMITED).

ESTABLISHED 1847.

OLDBURY WORKS, NEAR BIRMINGHAM.  
 MANUFACTURERS OF RAILWAY CARRIAGES AND WAGONS, AND EVERY  
 DESCRIPTION OF IRONWORK.

Passenger carriages and wagons built, either for cash or for payment,  
 over a period of years.

RAILWAY WAGONS FOR HIRE.  
 CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.  
 LONDON OFFICES,—7, GREAT WINCHESTER STREET BUILDINGS.

## STAFFORDSHIRE WHEEL AND AXLE COMPANY

MANUFACTURERS OF RAILWAY CARRIAGE, WAGON, AND CONTRAC-  
 TORS' WHEELS AND AXLES, AND OTHER IRONWORK used in the CON-  
 STRUCTION OF RAILWAY ROLLING STOCK.

OFFICES AND WORKS,

HEATH STREET SOUTH, SPRING HILL, BIRMINGHAM.

LONDON OFFICE,—118, CANNON STREET, E.C.

## THE BIRMINGHAM WAGON COMPANY (LIMITED)

MANUFACTURE RAILWAY WAGONS OF EVERY DESCRIPTION, for  
 HIRE and SALE, by immediate or deferred payments. They have also wagons  
 for hire capable of carrying 6, 8, and 10 tons, part of which are constructed spe-  
 cially for shipping purposes. Wagons in working order maintained by contract.  
 EDMUND FOWLER, Sec.

WAGON WORKS,—SMETHWICK, BIRMINGHAM.

\* Loans received on Debenture; particulars on application.

## WILLIAMS'S PERRAN FOUNDRY COMPANY,

PERRANWORTHAL, CORNWALL.

MANUFACTURERS OF STEAM PUMPING AND EVERY OTHER KIND OF  
 ENGINES, together with BOILERS, PUMP CASTINGS, and MINING TOOLS  
 of every description, of the very best quality. Estimates given for the supply of  
 any amount of machinery.

London Agent,—MR. EDWARD COOKE, 76, Old Broad-street, London, E.C.

## LABORATORY OF ANALYTICAL CHEMISTRY,—

4, THE CEDARS, PUTNEY, LONDON, S.W.

ESTABLISHED 1859.

ANALYSES AND REPORTS ON METALLIC ORES, METALS, &c., daily at-  
 tended to by Dr. T. L. PHIPSON, F.C.S., Member of the Chemical Society of  
 Paris, &c. Terms moderate.

## THE CHIVERTON AND PERRANZABULOE MINING DISTRICT.

**JUST PUBLISHED,** a neatly LITHOGRAPHED MAP of the  
 above district, showing the relative position of mines, all known lodes  
 cross courses, &c.

Size of map, 3 feet 6 inches by 2 feet 6 inches. Price, coloured, mounted, and  
 varnished, £1 1s.  
 Applications for copies to be addressed to Mr. E. H. BRENTON, Truro, or to  
 WILLIAM BRENTON, Plain-an-Gwarry, Redruth, Mine and Land Surveyors,  
 Draughtsmen, Lithographers. —Dated Nov. 10, 1869.

## THE VAN DISTRICT.—

Mr. SPARGO has RETURNED to TOWN from a tour of inspection of  
 the mines of this celebrated district. He has satisfied himself of the great  
 value of many of the sets now being developed, and is PREPARED to GIVE  
 a CONFIDENTIAL OPINION and PROFESSIONAL ADVICE, either person-  
 ally or by letter. Fee, £2 2s.  
 Gresham House, Oct. 8, 1869.

## THE MINING ATLAS.

Part IV. now in the press.

Will contain particulars of the various mines in the Van district, with plan  
 showing their position and line of lodes.

T. SPARGO, GRESHAM HOUSE, OLD BROAD STREET, LONDON E.C.

Every Wednesday, price 4d.; in monthly parts, 1s. 6d.; yearly subscription  
 (including postage), 17s. 6d.

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 its departments. The Weekly Reviews of Books and the Bibliography keep the  
 reader au courant with the literature of science all over the world, and the me-  
 rits of each new work of note; while the Reports of Meetings of learned bodies  
 —British and foreign—being for the most part specially furnished for this  
 journal, render it an accurate mirror of the proceedings of the scientific societies,  
 a carefully compiled diary of whose meetings is given weekly. The columns of  
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 questions in science, and generally as a channel of communication for scientific  
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 attractive department of each number, and under the heading of Answers to  
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 Office, 75, Great Queen-street London, W.C. Sold by all newsvendors.

# GWYNNE AND CO., ENGINEERS, ESSEX STREET WORKS, STRAND, LONDON, W.C.

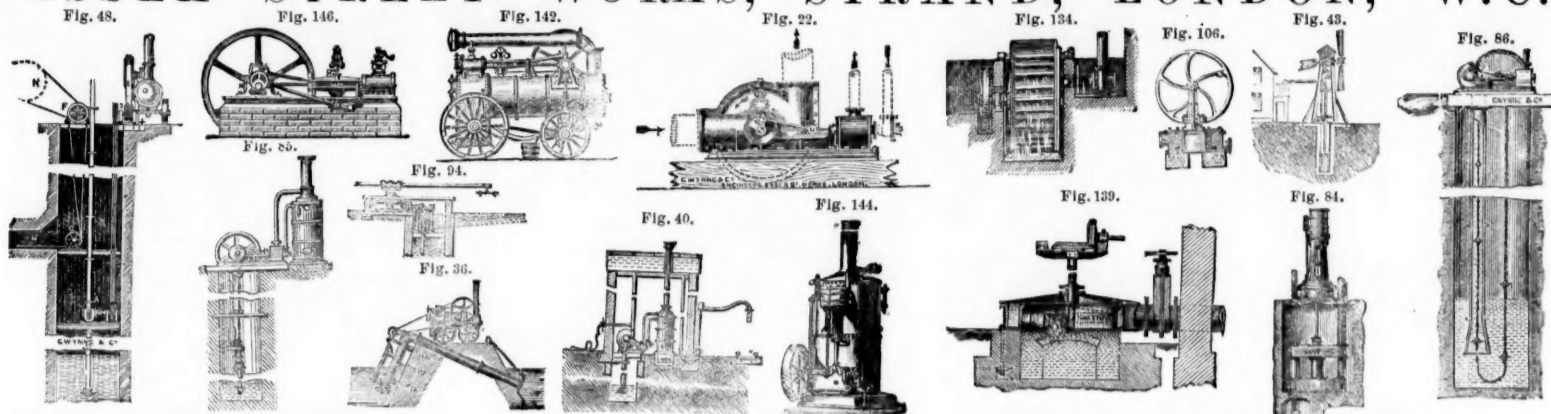


Fig. 144.—Vertical Engine, all sizes, from 2 to 20-horse power.  
Fig. 146.—Horizontal Engine, from 4 to 100-horse power.  
Fig. 142.—Portable Engine, from 2½ to 30-horse power.  
Fig. 40.—Gwynne and Co.'s Combined Stationary Pumping Engine.  
Fig. 139.—Turbine Water-wheel, from 1 to 300-horse power.

Fig. 22.—Combined Pumping Engine, all sizes, obtained Prize Medal, Paris Exhibition.  
Fig. 85.—Deep Well Pumping Engine, all sizes.  
Fig. 134.—Water-wheel Pumping Machinery.  
Fig. 36.—Gwynne and Co.'s Patent Syphon Drainage Machinery.  
Fig. 95.—Horse-power Pumping Machinery.

Fig. 86.—Chain Pump Pumping Engine.  
Fig. 48.—Deep Mine Centrifugal Pumping Machinery.  
Fig. 84.—Double-acting Vertical Pumping Engine.  
Fig. 106.—Gwynne and Co.'s Improved Plunger Hand Pump.  
Fig. 43.—Wind Power Pumping Machinery.

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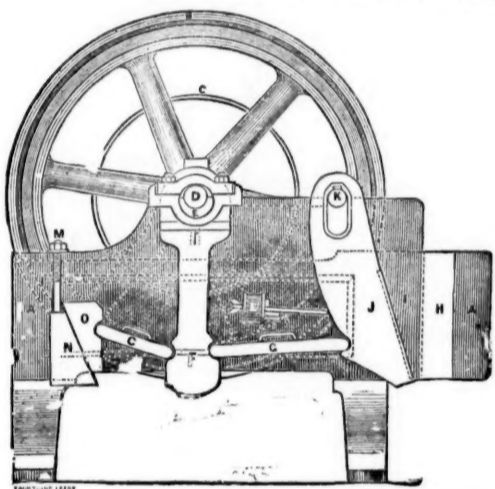
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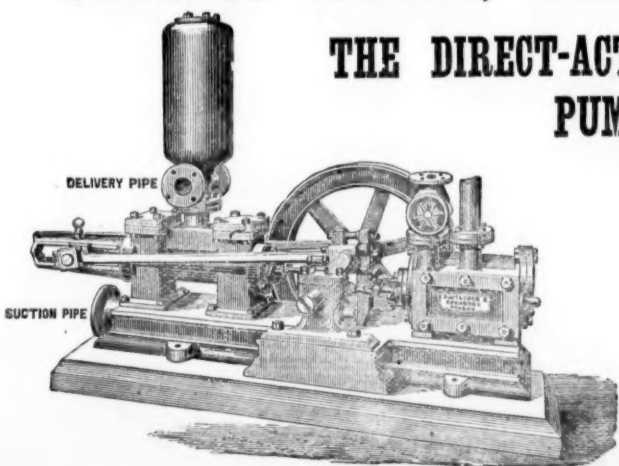
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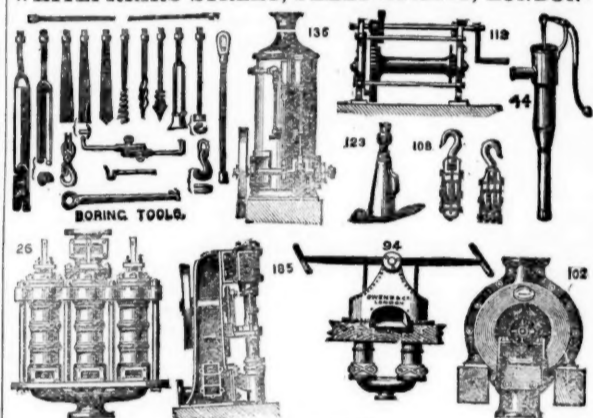
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5004 Bwch Consols, s. t. Cardigan	4 0 0	—	—	0 5 0	0 5 0
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916 Carrig, s. t. Newlyn	15 5 7	—	—	16 15 0	0 10 0
1280 Chanticleer, t. Flint	0 7 8	—	—	0 1 0	0 0 0
2450 Cook's Kitchen, c. Illogan	19 14 9	13	13 13½	2 19 0	6 0 0
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1024 Devon Gt. Consols, c. Tavistock†	1 0 0	133	135 145	1137 0 0	5 0 0
656 Ding Dong, t. Gwylfa†	49 14 6	25	23 25	5 0 0	1 10 0
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6000 Penhalls, t. St. Agnes	0 10 0	6	6 6½	0 10 0	0 5 0
12800 Prince of Wales, c. Calstock	0 12 0	1½	1½ 1½	0 10 0	0 10 0
1120 Providence, t. Uny Lelant†	10 6 7	38½	35 35	627 10 0	5 0 0
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937 South Wh. Crofty, c. Illogan	24 10 10	—	—	2 10 0	0 10 0
496 So. Wh. Frances, c. Illog.†	18 18 9	7	5 7	374 13 6	1 0 0
242 Spear Moor, t. St. Just	36 17 9	19	18 20	11 15 0	0 1 0
940 St. Ives Consols, t. St. Ives†	10 15 0	12	11½ 12	0 10 0	0 10 0
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508 Summer Hill, t. Mold†	3 18 6	—	—	2 2 0	0 0 0
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12000 Van, t. Llanidloes†	4 5 0	38½	38 40	0 10 0	0 5 0
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2882 West Great Work, t. Breage	5 11 0	—	—	0 2 0	0 2 0
512 West Wheal Frances, t. Illogan	106 15 0	40	37 39	643 10 0	5 0 0
4000 Wheal Seta, c. t. Camborne†	5 2 0	185	175 180	632 10 0	1 0 0
512 Wheal Bassett, c. Illogan	2 0 0	—	—	300 10 0	0 10 0
1024 Wheal Friendship, c. Tavistock	10 15 0	46	45 47½	27 10 0	1 10 0
512 Wheal Jane, s. t. Kea	5 4 6	5½	5 5½	4 8 0	0 5 0
4295 Wheal Kitty, t. St. Agnes	3 10 6	13	12 12½	11 7 6	0 15 0
1024 Wheal Kitty, t. Uny Lelant†	13 17 6	12	11 12	76 15 0	0 10 0
896 Wheal Margaret, t. Uny Lelant†	8 0 0	17	16½ 17	0 10 0	0 5 0
1024 Wheal Mary Ann, t. Menheniot†	2 12 0	—	—	0 10 0	0 5 0
1000 Wh. Mary Hutches, t. Plymouth	70 0 0	—	—	429 13 0	5 0 0
80 Wheal Owles, t. St. Just	58 10 0	27	27 28	254 15 0	2 0 0
396 Wheal Seta, t. c. Camborne	0 5 0	—	—	1 0 0	0 0 0
3000 Whitewell Lead, Clitheroe*	2 10 0	9½	—	49 6 0	0 5 0
17000 Wicklow, c. t. Wicklow	2 10 0	9½	—	49 6 0	0 5 0

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20000 Australian, c. South Australia†	7 7 6	—	—	0 1 0	0 6 0
15000 Cape Copper Mining*	7 0 0	18	16½ 17½	4 12 6	0 15 0
30000 Central American Association*	0 10 0	—	—	0 6 0	0 1 0
10000 Copiapo Mining Co., Chile†	16 10 0	3	2 3	0 4 0	0 4 0
76162 Don Pedro North, c. Chile†	2 10 0	4¼	4 4¼	1 6 0	0 3 0
7000 English and Australian, c.	2 10 0	—	—	1 6 0	0 3 0
25000 Fortuna, t. Spain*	2 0 0	3	2½ 3	1 17 0	0 9 0
20000 Gen. Mining Assoc., Nova Scotia†	20 0 0	—	—	23 10 0	0 15 0
10000 Gonnesa, t. Sardinia*	5 0 0	—	—	10 per cent.	Aug. 1868
60000 Kapunda Mining Co., Australia†	1 0 0	¾	¾ ¾	0 1 0	0 6 0
10000 Linares, t. Spain*	3 0 0	¾	¾ ¾	12 3 0	0 5 0
10000 Llanelli, c. Chile†	2 0 0	13½	12½ 13½	5 6 2	0 19 7
100000 Port Phillip, c. Chile*	1 0 0	1½	1½ 1½	1 3 6	0 1 6
120000 Scottish Australian Min. Co.†	1 0 0	1	¾ 1	6 per cent.	Nov. 1869
11000 St. John del Rey, Brazil†	15 0 0	17	16½ 17	81 10 0	4 5 0
4000 Swedish Sulphur Ore*	2 10 0	—	—	7½ per cent.	Dec. 1868
13500 Vancouver Coal Mining*	6 0 0	8	7½ 7½	3 3 6	0 9 0
50000 Victoria (London) [25000 £1 pd., 25000 12s. 6d. pd.]	4 0 0	—	—	0 9 7	0 7 0
40000 West Canada Mining Co.	1 0 0	—	—	0 19 6	0 2 6

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Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call
50000	Anglo-Argentine, <i>g, s</i> , Argentine Republic*	1 0 0	—	¾ ¾	Nov. 1866
100000	Anglo-Brazilian, <i>g</i> †	0 15 0	—	¾ ¾	Jan. 1869
20000	Australian United	2 2 6	3½	3 3½	Aug. 1869
2464	Burra Burra, <i>c</i> , South Australia†	5 0 0	—	—	Jan. 1869
20000	Capula, <i>s</i> , Mexico*	2 0 0	—	¾ ¾	Jan. 1869
30000	Chontales, <i>g, s</i> , Nicaragua†	5 0 0	—	¾ ¾	Mar. 1868
12000	Cobre Copper Company, <i>c</i> , Cuba†	45 10 0	—	—	Jan. 1869
15000	El Chico Silver Mining and Reduction Company*	5 0 0	—	—	Nov. 1866
60000	Fortune Copper Mining Co. of Western Australia	2 0 0	—	—	Fully pd.
10000	Frontino and Bolivia, <i>g</i> , New Granada†	0 14 0	1¼	1 1¼	May 1867
15000	Golden Cross, Brazil*	0 13 0	—	¾ 1	Feb. 1869
100000	Imperial Ottoman	1 0 0	—	—	Fully pd.
50000	Javali, <i>g</i> , Nicaragua*	2 0 0	—	—	Jan. 1869
7927	Lusitania (Portugal)†	2 15 0	¾	¾ ¾	Dec. 1866
83640	Mariquita, <i>g, s</i> , New Granada	1 0 0	—	—	Feb. 1868
12500	Nerbudda Coal and Iron, India†	6 10 0	—	—	Dec. 1867
51000	New Quebrada, <i>c</i> , Venezuela†	4 4 0	—	—	—
80000	Prestarena United, <i>g</i> , Italy†	2 17 6	1½	1 1¼	May 1866
4178	Rhenish Consolidated, (£600 £5 pd., £178 £2 10s. pd.)	0 14 0	1¼	1 1¼	June 1867
10000	Rossa Grande, Brazil*	1 0 0	—	—	Sept. 1866
15000	San Pedro del Monte, <i>s</i> , Mexico†	5 0 0	—	—	Fully pd.
10000	San Roque, <i>l</i> , Spain	0 6 0	—	¾ ¾	Oct. 1868
50000	Sao Vicente, Brazil†	0 10 0	¾	¾ ¾	Aug. 1869
100000	Taquaril, <i>g</i> , Brazil†	28 5 2	4¼	3¾ 4¼	May 1868
43174	United Mexican, <i>s</i> , Mexico†	1 12 6	—	—	Aug. 1869
30000	Val Antigua, <i>g</i> , Italy*	8 0 0	—	—	Fully pd.
6000	Val Sausal, <i>s, c, l</i> , Italy†	1 0 0	¾	¾ ¾	Fully pd.
6000	Victor Emanuel, <i>s, c, l</i> , Italy*	1 0 0	¾	¾ ¾	Fully pd.
80000	Worthing, <i>c</i> , South Australia†	1 0 0	¾	¾ ¾	Fully pd.
75000	Yorke Peninsula, South Australia†	3 0 0	1¼	1¼ 1½	Fully pd.
50000	Yudanamatana, <i>c</i> , South Australia†	—	—	—	—